ASRS Database Report Set

Multi-Engine Turbojet Aircraft Upsets Incidents

Report Set Description	Reports concerning turbojet uncommanded control surface movements and unusual aircraft attitudes.
Update Number	5.0
Date of Update	July 27, 2000
Number of Records in Report Set	50
Number of New Records in Report Set	35
Type of Records in Report Set	For each update, new records received at ASRS will displace a like number of the oldest records in the Report Set, with the objective of providing the fifty most recent relevant ASRS Database records. Records within this Report Set have been screened to assure their relevance to the topic.

AFS:262-7

MEMORANDUM FOR: **Recipients of Aviation Safety Reporting System Data**

SUBJECT: **Data Derived from ASRS Reports**

The attached material is furnished pursuant to a request for data from the NASA Aviation Safety Reporting System (ASRS). Recipients of this material are reminded of the following points, which must be considered when evaluating these data.

ASRS reports are submitted voluntarily. The existence in the ASRS database of reports concerning a specific topic cannot, therefore, be used to infer the prevalence of that problem within the National Airspace System.

Reports submitted to ASRS may be amplified by further contact with the individual who submitted them, but the information provided by the reporter is not investigated further. Such information may or may not be correct in any or all respects. At best, it represents the perception of a specific individual who may or may not understand all of the factors involved in a given issue or event.

After preliminary processing, all ASRS reports are de-identified. Following de-identification, there is no way to identify the individual who submitted a report. All ASRS report processing systems are designed to protect identifying information submitted by reports, such as, names, company affiliations, and specific times of incident occurrence. There is, therefore, no way to verify information submitted in an ASRS report after it has been de-identified.

The National Aeronautics and Space Administration and its ASRS contractor, Battelle Memorial Institute, specifically disclaim any responsibility for any interpretation which may be made by others of any material or data furnished by NASA in response to queries of the ASRS database and related materials.

Linda J. Connell, Director
Aviation Safety Reporting System

CAVEAT REGARDING STATISTICAL USE OF ASRS INFORMATION

Certain caveats apply to the use of ASRS statistical data. All ASRS reports are voluntarily submitted, and thus cannot be considered a measured random sample of the full population of like events. For example, we receive several thousand altitude deviation reports each year. This number may comprise over half of all the altitude deviations that occur, or it may be just a small fraction of total occurrences. We have no way of knowing which.

Moreover, not all pilots, controllers, air carriers, or other participants in the aviation system, are equally aware of the ASRS or equally willing to report to us. Thus, the data reflect **reporting biases**. These biases, which are not fully known or measurable, distort ASRS statistics. A safety problem such as near midair collisions (NMACs) may appear to be more highly concentrated in area “A” than area “B” simply because the airmen who operate in area “A” are more supportive of the ASRS program and more inclined to report to us should an NMAC occur.

Only one thing can be known for sure from ASRS statistics–they represent the **lower measure** of the true number of such events that are occurring. For example, if ASRS receives 300 reports of track deviations in 1993 (this number is purely hypothetical), then it can be known with certainty that at least 300 such events have occurred in 1993.

Because of these statistical limitations, we believe that the **real power** of ASRS lies in the **report narratives**. Here pilots, controllers, and others, tell us about aviation safety incidents and situations in detail. They explain what happened, and more importantly, **why** it happened. Using report narratives effectively requires an extra measure of study, the knowledge derived is well worth the added effort.

For text on the strengths and limitations of incident data, the process of using incidents for human factors evaluations, statistical analysis methods and other sources of incident data, see:

Chappell, S.L. (1994). Using voluntary incident reports for human factors evaluations. In N. Johnston, N. McDonald & R. Fuller (Eds.), Aviation Psychology in Practice. Aldershot, England: Ashgate.

ACN: 408051

Time
Date : 199807
Day : Thu
Local Time Of Day : 0601 To 1200

Place
Locale Reference.ATC Facility : JFK
State Reference : NY
Altitude.MSL.Bound Lower : 6000
Altitude.MSL.Bound Upper : 6000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.TRACON : WRI
Make Model : Jetstream 41

Component / 1
Aircraft Component : Autoflight Yaw Damper
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 3250
Experience.Flight Time.Last 90 Days : 120
Experience.Flight Time.Type : 1600
ASRS Report : 408051

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Approach

Events
Anomaly.Aircraft Equipment Problem : Critical
Independent Detector.Other.Flight CrewA : Unspecified
Resolutory Action.Flight Crew : Declared Emergency
Resolutory Action.Other : Not Resolved Other

Narrative :
WHILE ENRTE TO PHL AT 6000 FT AND 250 KIAS, 30 NM SW OF JFK ON THE JFK R-210, THE ACFT EXPERIENCED AN UNCOMMANDED RHYTHMIC YAWING FROM L TO R. THE YAWING CEASED AFTER SLOWING BELOW 220 KIAS. WE ELECTED TO RETURN TO JFK, DECLARED AN EMER, AND LANDED WITHOUT INCIDENT. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR STATED THE ACFT WAS A JETSTREAM 4100 AND THE YAW DAMPER SYS WAS DEFERRED AS INOP PER THE MEL. THE RPTR SAID THE RUDDER INPUTS WERE AT A 2-3 SECOND FREQ AND THE YAW DAMPER SYS HAD BEEN DEFERRED AND RENDERED INOP PER THE MEL PROCS. THE RPTR SAID MAINT INVESTIGATED THIS INCIDENT AND DISCOVERED THE MEL REQUIRES ONE CIRCUIT BREAKER TO BE PULLED AND LOCKED OUT BUT SHOULD HAVE REQUIRED AN ADDITIONAL CIRCUIT BREAKER TO BE PULLED TO PREVENT YAW INPUTS TO THE RUDDER ACTUATOR. THE RPTR SAID THE COMPANY HAS STARTED PROCS TO CORRECT AND UPGRADE THE MEL PROCS REQUIRING TWO CIRCUIT BREAKERS TO BE PULLED AND LOCKED OUT TO PREVENT UNWANTED RUDDER INPUTS.

Synopsis :
A JETSTREAM 4100 IN CRUISE AT 6000 FT DECLARED AN EMER AND DIVERTED DUE TO UNCOMMANDED RUDDER INPUTS FROM THE YAW DAMPER SYS.

ACN: 409475

Time
Date : 199807
Day : Tue
Local Time Of Day : 0601 To 1200

Place
Locale Reference.ATC Facility : EAU
State Reference : WI
Altitude.MSL.Bound Lower : 20000
Altitude.MSL.Bound Upper : 30000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.ARTCC : ZMP
Make Model : A320

Aircraft / 2
Make Model : B757 Undifferentiated or Other Model

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 16000
Experience.Flight Time.Last 90 Days : 200
Experience.Flight Time.Type : 50
ASRS Report : 409475

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Radar

Person / 4
Function.Oversight : PIC
Function.Flight Crew : Captain

Events
Independent Detector.Other.Flight CrewA : Unspecified
Resolutory Action.None Taken : Detected After The Fact
Resolutory Action.None Taken : Insufficient Time

Narrative :
DURING DSCNT ON EAU2 ARR INTO MSP WE ENCOUNTERED 2 UNCOMMANDED ROLL EXCURSIONS. WE WERE IN THE CLR WITH NO SIGNIFICANT WX IN DSCNT BTWN FL300-200. BOTH EVENTS FELT AS IF WE WERE IN SOME TYPE OF WAKE TURB. FIRST EVENT ROLLED US TO THE L AND AIRBUS, WHICH HAS POSITIVE STATIC STABILITY AND WAS ON AUTOPLT, WAS SLOW TO RETURN TO LEVEL FLT. SECOND EVENT WAS SO UNCOMFORTABLE THAT FO, WHO WAS FLYING, CLICKED OFF AUTOPLT AND ATTEMPTED TO LEVEL WINGS, BUT WAS UNABLE TO DO SO. WE OBSERVED ANOTHER ACFT, ON THE TCASII, ON DSCNT 7-8 MI IN FRONT OF US. ATC RPTED THAT ACFT WAS A B757.

Synopsis :
AN A320 FOLLOWING A B757 IN ZMP AIRSPACE, FLIES INTO THE WAKE TURB OF THE PRECEDING B757.

ACN: 409910

Time
Date : 199808
Day : Tue
Local Time Of Day : 0601 To 1200

Place
Locale Reference.Airport : TPA
State Reference : FL
Altitude.AGL.Bound Lower : 0
Altitude.AGL.Bound Upper : 300

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.Tower : TPA
Make Model : PA-34-200t Turboseneca Ii

Person / 1
Function.Flight Crew : Single Pilot
Experience.Flight Time.Total : 2872
Experience.Flight Time.Last 90 Days : 62
Experience.Flight Time.Type : 1069
ASRS Report : 409910

Person / 2
Function.Controller : Local

Events
Anomaly.Other Anomaly : Loss Of Aircraft Control
Independent Detector.Other.Flight CrewA : Unspecified
Resolutory Action.Flight Crew : Declared Emergency
Resolutory Action.Other : Unspecified

Narrative :
I PERFORMED A NORMAL PREFLT INSPECTION AND START-UP, AND TAXIED FOR TKOF FROM RWY 36R. THE ACFT ACCELERATED NORMALLY, AND ROTATED WITH SLIGHTLY LESS BACK PRESSURE THAN USUAL. AS THE ACFT ACCELERATED THROUGH APPROX 95 KTS, THE ELEVATOR BECAME VERY LIGHT, ALMOST AS THOUGH THERE WAS NO FEEDBACK THROUGH THE CTL CABLES. AS THE ACFT ACCELERATED FURTHER, THE CTL WHEEL BEGAN OSCILLATING IN AND OUT, INCREASING IN MAGNITUDE TO 3-4 INCHES AS THE AIRSPD APCHED NORMAL CLB SPD (115-120 KTS). THE FREQUENCY OF OSCILLATION WAS ABOUT 1/2-3/4 OF A SECOND, AND BECAME QUITE ENERGETIC. AT THAT POINT, THE ACFT BECAME UNCTLABLE IN SMALL PITCH CHANGES, BUT REMAINED CTLABLE IN LARGE, GENERAL DIRECTION PITCH CHANGES. BY THEN, THE ACFT HAD CLBED TO APPROX 300 FT AGL. I REDUCED PWR AND LEVELED OFF. AS THE ACFT DECELERATED, THE CTL WHEEL OSCILLATIONS DECREASED IN MAGNITUDE, BUT NOT IN FREQUENCY. I CALLED TPA TWR AND TOLD THE LCL CTLR WE HAD A CTL SURFACE PROB, AND WERE MAKING A R TURN TO ENTER A R DOWNWIND AND NEEDED TO LAND IMMEDIATELY. A FEW SECONDS LATER, I ATTEMPTED TO DESCRIBE THE NATURE OF THE PROB TO THE LCL CTLR SO IT WOULD BE ON TAPE IN CASE THE OUTCOME OF THE ADVENTURE WAS LESS THAN SUCCESSFUL. BUT, BTWN TRYING TO FLY THE AIRPLANE, PLAN THE APCH AND RECONFIGURE FOR LNDG, MY EXPLANATION WAS LESS THAN TEST-PLT CALIBER. THE LCL CTLR CLRED US TO LAND ON ANY RWY, AND INFORMED ME HE WAS ROLLING THE EQUIP. I KEPT THE APCH LOW, SLOW AND CLOSE IN, AND REPLIED THAT WE WOULD (WITH ANY LUCK) LAND ON RWY 27. AS THE ACFT DECELERATED, THE PROB PROGRESSIVELY WENT AWAY, UNTIL A RELATIVELY NORMAL LNDG WAS COMPLETED. I TAXIED DIRECTLY TO THE MAINT HANGAR, AS I EXPECTED TO FIND SOMETHING REALLY MAJOR AND EXPENSIVE WRONG WITH THE AIRPLANE. AS I SHUT DOWN AND CLBED OUT OF THE AIRPLANE, ONE OF THE GND CREW GUYS DROVE BEHIND THE AIRPLANE IN A GOLF CART. HE HOLLERED OUT SOMETHING TO ME ABOUT THE ELEVATORS FEELING A LITTLE HVY. I LOOKED BACK AT THE TAIL AND DISCOVERED THE RED COURTESY CARPET THAT THEY PLACE ONTHE RAMP NEAR THE ACFT DOOR DRAPED AROUND THE STARBOARD SIDE OF THE HORIZ STABILATOR ABOUT 1 FT OR SO FROM THE VERT STABILIZER. THE 'FLYING CARPET' HAD MADE THE ENTIRE, IF ABBREVIATED, FLT DRAPED OVER THE TAIL. IT WAS NOT LAYING AERODYNAMICALLY FLAT AROUND THE STABILATOR, BUT ABOUT 1/3 OF THE CARPET WAS BUNCHED UP IN A MAJOR FOLD CREATING A LARGE HUMP NEAR THE VERT STABILIZER. AFTER OVER 1000 HRS TOGETHER, THIS AIRPLANE AND I KNOW EACH OTHER FAIRLY WELL, BUT DURING THE PREFLT CTL MOVEMENT CHK, I NOTICED NO DIFFERENCE IN THE FEEL OR FREEDOM OF ELEVATOR MOVEMENT. THE LCL CTLR DID A GREAT JOB. HE RECOGNIZED THE SERIOUSNESS OF THE PROB (PROBABLY BY THE PITCH OF MY VOICE), TOOK THE INITIATIVE AND MADE MY LIFE AS EASY AS POSSIBLE. HE ALSO ROLLED THE EQUIP, WHICH COULD HAVE BEEN MOST HELPFUL HAD THE FLT TERMINATED OTHER THAN IT DID. BY THE WAY, THE CRASH AND RESCUE GUYS MUST SLEEP IN THEIR TRUCKS WITH THE ENGS RUNNING. THE WHOLE FIASCO COULDN'T HAVE LASTED MORE THAN 2 MINS, BUT THEY ARRIVED AT THE RWY ABOUT THE SAME TIME I DID. GREAT RESPONSE TIME. IN 25 YRS OF FLYING AND BEING AROUND AIRPLANES, I HAVE NEVER HEARD OF THIS HAPPENING. NEITHER HAD ANYONE AT THE FBO. THE ODDS OF THE PROP LIFTING THE CARPET OFF THE GND AND DEPOSITING IT EVENLY OVER THE TAIL, THEN THE CARPET REMAINING ON THE TAIL THROUGHOUT THE FLT, LNDG AND TAXI IN, ARE OUTRAGEOUS. IF THE CARPET HAD FALLEN FROM THE TAIL AT ANY POINT BEFORE ARRIVING AT THE MAINT HANGAR, WE PROBABLY WOULD NEVER HAVE FIGURED OUT WHAT CAUSED THE PROB. AS IT TURNED OUT, THERE WAS NO DAMAGE TO THE AIRPLANE AT ALL, AND I DEPARTED FOR ORMOND BEACH 20 MINS LATER. PERHAPS IT WOULD BE WORTHWHILE TO REVIEW PAST UNEXPLAINED ACCIDENTS OR INCIDENCES OF LOSS OF CTL OR CTL OSCILLATIONS IMMEDIATELY AFTER TKOF TO SEE IF A COURTESY CARPET COULD HAVE BEEN INVOLVED. PERHAPS IT WOULD ALSO BE WORTHWHILE TO SUGGEST FBO'S END THE PRACTICE OF PROVIDING A COURTESY CARPET FOR THE DEP OF PROP DRIVEN AIRPLANES. ONCE THE PLT IS IN THE AIRPLANE WITH THE DOOR SHUT, HE HAS NO WAY OF KNOWING WHAT HAPPENS TO THE CARPET OR WHERE IT GOES. MOST OF THE TIME, THE THING JUST LAYS THERE ON THE RAMP. HOWEVER, I HAVE SEEN THEM BLOW ACROSS RAMPS PAST OTHER ACFT. THE RED CARPET TREATMENT IS GREAT UPON ARR. IT MAKES EVERYONE FEEL IMPORTANT, AND PROBABLY CAN DO NO HARM. HOWEVER, ON DEP, AFTER THE FBO HAS OUR MONEY, THERE IS LITTLE EMOTIONAL OR PRACTICAL BENEFIT TO PROVIDING THE CARPET.

Synopsis :
PLT OF SENECA II HAS LOSS OF ACFT CTL DUE TO OSCILLATION OF THE CTL WHEEL AFTER LIFTOFF. AFTER RETURNING TO LAND IT IS DISCOVERED THAT THE RED CARPET LAID OUT FOR DEPARTING ACFT HAD BEEN LIFTED AND LANDED ON THE TAIL SURFACES.

ACN: 410793

Time
Date : 199808
Day : Wed
Local Time Of Day : 0601 To 1200

Place
Locale Reference.Airport : ATL
State Reference : GA
Altitude.AGL.Bound Lower : 1500
Altitude.AGL.Bound Upper : 1500

Environment
Flight Conditions : Marginal

Aircraft / 1
Controlling Facilities.TRACON : ATL
Make Model : B727-200

Aircraft / 2
Make Model : B727-200

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 10500
Experience.Flight Time.Last 90 Days : 180
Experience.Flight Time.Type : 3500
ASRS Report : 410793

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Flight Crew : Second Officer

Person / 4
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 5
Function.Controller : Approach

Events
Anomaly.Non Adherence : Published Procedure
Anomaly.Other Anomaly : Loss Of Aircraft Control
Independent Detector.Other.Flight CrewA : Unspecified
Resolutory Action.Flight Crew : Regained Aircraft Control

Narrative :
ENCOUNTERED WAKE TURB RESULTING IN AN ABRUPT 2-5 DEG UNCOMMANDED ROLL. DEPARTING PAX COMMENTED ABOUT IT. ZTL JAMS IT AS CLOSE AS THEY CAN -- GUESS THEY'LL STOP WHEN THEY KILL SOMEONE. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR HAS BEEN SURVEYING THE ACTIONS OF HIS COMPANY AND ATC. IT IS ALLEGED THAT THE COMPANY ACTUALLY IS 'WORKING WITH' ATC IN TRYING TO ACCOMPLISH AN INCREASED CAPACITY AT ATL BECAUSE THAT ARPT PRODUCES A LOT OF REVENUE FOR THE ACR. THE AVERAGE DISTANCE BTWN ACFT IS BTWN 2-3 MI, WITH 2 BEING MORE THE NORM THAN 3. HE FEELS THAT HE CAN'T, AS A PLT, DO MUCH WHILE ON APCH OTHER THAN TRY TO INCREASE HIS SEPARATION BY REDUCING AIRSPD. ON THE GND HE IS TRYING TO CHANGE POLICY.

Synopsis :
AN ARRIVING B727 PIC COMPLAINS OF THE TEMPORARY LOSS OF ACFT CTL WHEN ENCOUNTERING THE WAKE TURB OF A PRECEDING B727. CAPT CITES THE ATC PROCS AND ACR POLICIES FOR INCREASING ARPT CAPACITY AS CAUSAL.

ACN: 411097

Time
Date : 199808
Day : Thu
Local Time Of Day : 1801 To 2400

Place
Locale Reference.ATC Facility : GSO
State Reference : NC
Altitude.MSL.Bound Lower : 23000
Altitude.MSL.Bound Upper : 23000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.ARTCC : ZID
Make Model : B737-200

Component / 1
Aircraft Component : Rudder Control System
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 9000
Experience.Flight Time.Last 90 Days : 200
Experience.Flight Time.Type : 3000
ASRS Report : 411097

Person / 2
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 5000
Experience.Flight Time.Last 90 Days : 210
Experience.Flight Time.Type : 95
ASRS Report : 411117

Person / 3
Function.Controller : Radar

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Other Anomaly : Loss Of Aircraft Control
Independent Detector.Other.Flight CrewA : Unspecified
Resolutory Action.Flight Crew : Declared Emergency
Resolutory Action.Flight Crew : Regained Aircraft Control
Resolutory Action.Controller : Issued New Clearance
Resolutory Action.Other : Unspecified
Consequence.FAA : Investigated

Narrative :
AT FL230 CRUISE, ACFT YAWED ABRUPTLY TO L, THEN STAYED IN 'OUT OF TRIM POS' FOR A MIN OR TWO, THEN YAWED ABRUPTLY TO THE R. WE SHUT OFF YAW DAMPER IN ACCORDANCE WITH COMPANY PROCS. UNCOMMANDED RUDDER INPUTS CONTINUED PERIODICALLY FOR REMAINDER OF THE FLT. DECLARED EMER AND LANDED UNEVENTFULLY IN GSO. ENTIRE CREW DID AN OUTSTANDING JOB COORDINATING AND HANDLING THE PAX. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR STATED THAT AFTER LNDG, THE ACFT WAS IMPOUNDED BY THE FAA AND NTSB. IN CONJUNCTION WITH BOEING, ALL APPLICABLE ITEMS ON THE ACFT THAT COULD AFFECT THE INCIDENT WERE REPLACED. THESE ITEMS WERE GIVEN EXHAUSTIVE TESTING, AND NO PROBS WERE FOUND. THE ACFT HAS SINCE FLOWN FOR ABOUT 2 WKS WITH NO FURTHER RUDDER DISCREPANCY NOTED. BOEING HAS TAKEN THE FLT RECORDER FOR ANALYSIS. AT THIS TIME, IT IS NOT YET COMPLETE. THE CAPT FURTHER STATED THAT THE ACFT WAS IN CRUISE AT MACH .76 AT FL230 WHEN THE EVENT OCCURRED. THERE WAS NO MOVEMENT OF THE RUDDER PEDALS. IT TOOK APPROX 50 DEGS OF CTL WHEEL MOVEMENT TO OVERCOME THE RUDDER INPUT. HE DID NOT ATTEMPT ANY FURTHER RUDDER INPUT WITH THE RUDDER PEDALS BECAUSE HE WAS SUCCESSFULLY CTLING THE PROB WITH THE CTL WHEEL. HE DID NOT KNOW WHAT WOULD HAPPEN IF HE TRIED TO USE THE RUDDER. TURNING OFF THE YAW DAMPER MADE NO DIFFERENCE, THE INPUT CONTINUED. THE SKID BALL WAS ALMOST TO THE EDGE OF ITS HOUSING. THE INPUT WAS TO THE L. THE CAPT DID NOT GO TO STANDBY RUDDER, THEREBY SHUTTING OFF EITHER A OR B RUDDER SYS. AFTER A PERIOD OF TIME THE INPUT STOPPED. IN HIS NARRATIVE THE CAPT SAID HE THEN HAD R INPUT. HE NOW FEELS THAT THE RUDDER JUST RETURNED TO NEUTRAL. FOR THE REMAINDER OF THE FLT, THE CAPT COULD FEEL A SLIGHT PULSING IN THE RUDDER PEDALS. THIS PULSING CONTINUED THROUGH LNDG. THERE WAS NO CONVECTIVE ACTIVITY AROUND, NOR WERE THERE ANY OTHER ACFT IN THE VICINITY THAT COULD HAVE UPSET THE ACFT. THE AUTOTHROTTLES WERE OFF, AND THE AUTOPLT WAS OFF AFTER THE INITIAL EVENT. THE CAPT HAS BEEN EXTENSIVELY DEBRIEFED BY THE FAA, NTSB, BOEING AND HIS COMPANY'S FLT AND ENGINEERING PERSONNEL. THE CAPT'S AIRLINE IS ONE WHO IS WIDELY RECOGNIZED AS HAVING AN OUTSTANDING MAINT PROGRAM. THE CAPT HAS OVER 6 YRS EXPERIENCE ON THE B737-200.

Synopsis :
B737 CREW HAD UNCOMMANDED RUDDER INPUT IN CRUISE. TURNING YAW DAMPER OFF MADE NO DIFFERENCE.

ACN: 417266

Time
Date : 199810
Day : Sun
Local Time Of Day : 1201 To 1800

Place
Locale Reference.ATC Facility : PKE
State Reference : CA
Altitude.MSL.Bound Lower : 32600
Altitude.MSL.Bound Upper : 33000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.ARTCC : ZLA
Make Model : B737-300

Aircraft / 2
Make Model : A300

Person / 1
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 12000
Experience.Flight Time.Last 90 Days : 250
Experience.Flight Time.Type : 500
ASRS Report : 417266

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 12000
Experience.Flight Time.Last 90 Days : 200
Experience.Flight Time.Type : 8000
ASRS Report : 417172

Person / 3
Function.Controller : Radar

Person / 4
Function.Oversight : PIC
Function.Flight Crew : Captain

Events
Anomaly.Altitude Deviation : Excursion From Assigned Altitude
Anomaly.Other Anomaly : Loss Of Aircraft Control
Independent Detector.Other.Flight CrewA : Unspecified
Resolutory Action.Flight Crew : Regained Aircraft Control
Resolutory Action.Flight Crew : Returned to Intended Course or Assigned Course
Resolutory Action.Controller : Issued New Clearance

Narrative :
AT CRUISE, FL330, AUTOPLT ENGAGED, ACFT BEGAN TO BUFFET. CAPT WAS PF. HE IMMEDIATELY PUT HIS HANDS ON THE CTLS. SUDDENLY, WITHOUT WARNING, ACFT ENCOUNTERED SEVERE TURB AND BEGAN TO QUICKLY ROLL L. CAPT DISENGAGED AUTOPLT AND BEGAN TO APPLY OPPOSITE CTL (TO R). ROLL L INCREASED, TURB INCREASED. CAPT STEADILY INCREASED (TO R) OPPOSITE CTL TO NO AVAIL. ACFT CONTINUED TO ROLL L. CAPT RECOGNIZED THAT HE WOULD QUICKLY RUN OUT OF OPPOSITE CTL AND BEGAN A RAPID DSCNT. I IMMEDIATELY NOTIFIED ATC OF OUR DSCNT AND WHY (AT FL328). AFTER WE STABILIZED, AROUND FL326, WE WERE CLRED TO FL290 AND CONTINUED OUR DSCNT. CONFERRING WITH ATC, WE FOUND THAT A HVY A300 WAS 10 MI AHEAD OF US AT FL330. WE THINK WE ENCOUNTERED THE A300 WAKE. NO OTHER ACFT IN THE AREA RPTED SEVERE TURB. AFTER SEVERAL MINS, WE WERE CLRED BACK TO FL330, ON A COURSE DIVERGING THE A300'S. FLT CONTINUED AND WAS COMPLETED WITH NO FURTHER INCIDENT. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR PARTICIPATED IN THE WAKE TURB CALLBACK STUDY. RPTR STATED THE SUDDENNESS OF THE EVENT IS WHAT STARTLED THEM. ACFT WENT UP 200 FT AND ROLLED 45 DEGS L EVEN THOUGH FULL OPPOSITE AILERON WAS APPLIED. ACFT THEN DSNDED ABOUT 800 FT FROM THERE. CAPT LET IT DSND HOPING TO GET OUT OF WHATEVER WAKE THEY WERE IN. AFTER REGAINING CTL OF THE ACFT, THE FLC THEN REQUESTED LOWER ALT, AND A SHORT VECTOR TO THE SIDE OF THE AIRWAY. THEY ALSO SLOWED DOWN. AFTER THE SEPARATION INCREASED FROM THE A300, THE FLC CLBED BACK TO FLT PLAN CRUISE ALT AND THE FLT WAS COMPLETED WITH NO FURTHER TURBULENT EVENTS. SUPPLEMENTAL INFO FROM ACN 417172: SHORTLY AFTER LEVELOFF AT FL330, IN LONG RANGE CRUISE, AUTOPLT ENGAGED, ACFT BEGAN TO SHUDDER. I IMMEDIATELY REDUCED PWR AS IT FELT LIKE THE ONSET OF MACH BUFFET. AS THE BUFFETING INTENSIFIED, THE ACFT BEGAN TO ROLL L DESPITE THE AUTOPLT EFFORT TO MAINTAIN STRAIGHT AND LEVEL FLT. AS THE ROLL TO THE L INCREASED, I DISCONNECTED THE AUTOPLT, LOWERED THE NOSE AND ROLLED THE ACFT BACK TO WINGS LEVEL. WE IMMEDIATELY NOTIFIED ZLA THAT WE WERE DSNDING, HAD ENCOUNTERED EXTREME TURB, AND REQUESTED CLRNC TO FL290. AFTER DSNDING 400 FT, THE TURB SUBSIDED. WE ASKED ATC IF WE WERE FOLLOWING A HVY ACFT. WE WERE INFORMED THAT WE WERE 10 MI IN TRAIL OF AN AIRBUS 300. AN OFF COURSE VECTOR WAS ASSIGNED AND WE EVENTUALLY RETURNED TO FL330. FLT CONTINUED UNEVENTFULLY TO OUR DEST.

Synopsis :
B737-300 ENCOUNTERED WAKE TURB FROM A PRECEDING A300 IN ZLA AIRSPACE. THE B737-300 EVALUATES IT AS A SEVERE OCCURRENCE. NO INJURIES OR DAMAGE OCCURRED.

ACN: 417635

Time
Date : 199810
Day : Sun
Local Time Of Day : 1201 To 1800

Place
Locale Reference.Airport : SFO
Locale Reference.ATC Facility : SFO
State Reference : CA
Altitude.AGL.Bound Lower : 400
Altitude.AGL.Bound Upper : 400

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.Tower : SFO
Make Model : Regional Jet Cl65

Aircraft / 2
Make Model : B777 Undifferentiated or Other Model

Person / 1
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 3500
Experience.Flight Time.Last 90 Days : 270
Experience.Flight Time.Type : 425
ASRS Report : 417635

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 3
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 4
Function.Controller : Local

Events
Anomaly.Other Anomaly : Loss Of Aircraft Control
Independent Detector.Other.Flight CrewA : Unspecified
Resolutory Action.Flight Crew : Exited Adverse Environment
Resolutory Action.Flight Crew : Regained Aircraft Control
Resolutory Action.Other : Flight Crew Executed Missed Approach Or Go Around

Narrative :
WE WERE IN THE PROCESS OF MAKING A VISUAL APCH TO RWY 28L AT SFO. ATC WAS SETTING UP SIMULTANEOUS VISUALS TO BOTH RWYS 28L AND 28R. WE HAD PREVIOUSLY RPTED A B777 IN SIGHT ON VISUAL TO RWY 28R. ON APPROX 1/4 MI FINAL AT 400 FT AGL, WE EXPERIENCED TURB AND UNCOMMANDED ROLL. PF INITIATED A GAR. I NOTED FMS COMPUTED WINDS 035 DEGS AT 10 KTS. OUR SECOND VISUAL APCH AND LNDG WERE NORMAL. WIND CONTINUED TO BE 035 DEGS AT 10 KTS AND UP TO 17 KTS. SFO TWR DID ASK WHY THE 'GAR.' I EXPLAINED TO GND CTL THE WIND SIT, AND HOW WE UNDERSTOOD THAT THE TWR CTLR HAS NO WAY OF KNOWING ABOUT WINDS AT THAT LOCATION. I SUGGEST THAT ATC MAKE 'WINDS ALOFT' REQUESTS FROM THE NUMEROUS FMS EQUIPPED ACFT IN THE AREA. THEY SHOULD THEN PARALLEL APCHING ACFT AND MATCH SPDS. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR HAD NOTHING MORE TO ADD THAN THE INFO SUPPLIED FOR THE WAKE TURB RPT. RPTR FELT THAT HAD THE ACFT BEEN ABREAST OF EACH OTHER THE INCIDENT WOULD NOT HAVE OCCURRED. INITIAL SPACING IS EVERYTHING, ALONG WITH PARALLEL SPDS FOR THE APCH.

Synopsis :
A CL65 ON SHORT APCH TO SFO RWY 28L SUFFERS A WAKE TURB ENCOUNTER FROM THE PRECEDING B777 AHEAD AND TO THE R ON SHORT FINAL TO RWY 28R. THE CL65 PERFORMS A GAR.

ACN: 420228

Time
Date : 199810
Day : Fri
Local Time Of Day : 1801 To 2400

Place
Locale Reference.ATC Facility : SHV
State Reference : LA
Altitude.MSL.Bound Lower : 6000
Altitude.MSL.Bound Upper : 6000

Environment
Flight Conditions : VMC

Person / 1
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 4234
Experience.Flight Time.Last 90 Days : 270
Experience.Flight Time.Type : 440
ASRS Report : 420228

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 9000
Experience.Flight Time.Last 90 Days : 250
Experience.Flight Time.Type : 4800
ASRS Report : 419766

Person / 3
Function.Controller : Approach

Events
Anomaly.Aircraft Equipment Problem : Critical
Independent Detector.Other.Flight CrewA : Unspecified
Resolutory Action.Other : Not Resolved Other
Consequence.Other : Aircraft Damaged

Narrative :
WHILE IN THE DSCNT FOR SHV, APPROX 8 MINS FROM THE ARPT, PASSING THROUGH 6000 FT MSL, WE RECEIVED A SINGLE STROKE CHIME, MASTER CAUTION, AND THE YELLOW 'R CHIP DETECT' LIGHT. WE HAD ALREADY CALLED IN RANGE TO COMPANY ON THE ARPT, WE HAD RECEIVED THAT ATIS, HAD COMPLETED THE DSCNT AND APCH CHKLIST INCLUDING NOTIFYING THE FLT ATTENDANT TO PREPARE FOR LNDG. AS THE CAPT WAS PASSING ME THE QRH TO BEGIN PROCS ON THE R ENG CHIP LIGHT, I NOTICED SMOKE THROUGH SOME LIGHT BEAMS SHINING IN THE COCKPIT. I IMMEDIATELY CALLED 'SMOKE IN THE COCKPIT.' AS I WAS REACHING AROUND TO PUT MY OXYGEN MASK ON, THE CAPT AND I BEGAN VERBALLY RECITING THE MEMORY ITEM FOR SMOKE IN THE COCKPIT. AS SOON AS I HAD PLACED MY MASK ON, VERIFIED THE REGULAR WAS IN THE 100% POS, TURNED THE FLOW OF OXYGEN ON, SWITCHED MY MIKE SWITCH FROM BOOM TO MASK, PLACED MY HEAD SET ON. THE CAPT SAID 'YOUR ACFT' WHERE I THEN TOOK CTL OF THE ACFT CONTINUING A DSCNT TOWARDS THE PLANNED DEST ARPT. AFTER DONNING HIS SAME EQUIP, HE SAID 'MY ACFT' TWICE AND HE WAS AGAIN FLYING. HE HAD TO SHOUT HIS ACFT TWICE BECAUSE HE LATER ADMITTED TO ME THAT HE HAD NOT TURNED HIS MIKE SWITCH TO MASK FROM THE BOOM POS. IMMEDIATELY AFTER HE BEGAN FLYING THE ACFT AGAIN, WE EXPERIENCED A LARGE EXPLOSION FROM THE R ENG AND THE ACFT SUDDENLY DECELERATED AND YAWED TO THE R AND THE CAPT (PF) IMMEDIATELY REGAINED CTL OF THE ACFT AND BEGAN COMMANDING THE 'ENG FAILURE' MEMORY ITEM CHKLIST. I WAS ALREADY TRYING TO SCAN WHAT INSTS AND GAUGES I COULD SEE TO CONFIRM THAT WE INDEED DID HAVE A R ENG FAILURE. THE SMOKE WAS SO THICK BY THIS TIME THAT THE GAUGES WERE JUST A FAINT GLOW ON THE PANEL. HE COMMANDED 'R PWR LEVER.' I PLACED MY HAND ON IT AND WE CONCURRED AND HE SAID RETARD AND I RETARDED THE PWR LEVER. HE THEN COMMANDED R CONDITION LEVER, FUEL OFF, AND I PULLED THE CONDITION LEVER TO FUEL OFF. I COULD SEE THAT THE PROP HAD FEATHERED AND I THEN BEGAN THE QRH PROCS. APCHING THE ARPT THE CAPT CALLED FOR GEAR DOWN AND WE BEGAN THE BEFORE LNDG CHKLIST USING THE QRH. UPON THE ROLLOUT AND LNDG, I ASKED THE CAPT IF WE WERE GOING TO EVAC THE ACFT ON THE RWY. HE SAID YES, AND I HEARD HIM SAY TO THE R. AS I WAS INFORMING THE FLT ATTENDANT TO EVAC TO THE R, HE SAID 'NO, NO, LEFT, LEFT.' AT THAT TIME I INFORMED THE FLT ATTENDANT TWICE THAT WE WOULD BE EVACING TO THE L. UPON THE ACFT STOPPING, I IMMEDIATELY WENT TO THE EVAC CHKLIST ON THE YOKE AND BEGAN THOSE PROCS WHICH INCLUDED SHUTTING DOWN THE REMAINING RUNNING #1 ENG. THE CAPT THEN TOLD ME TWICE TO LEAVE THE ACFT, AT WHICH POINT I BEGAN ASSISTING THE FLT ATTENDANT IN EVACING THE REMAINING PAX, WHICH INCLUDED GRABBING HAND-HELD ITEMS FROM THE PAX THAT WERE TRYING TO CARRY ITEMS WITH THEM DURING THE EVAC. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR STATED THE COCKPIT FILLED WITH SMOKE WITH THE VISIBILITY LIMITED TO ABOUT 24 INCHES AND THE ONLY ENG WARNING WAS A 'CHIP' DETECTOR LIGHT AND MASTER CAUTION CHIME. THE RPTR SAID SHORTLY AFTER THE SMOKE WAS DISCOVERED, THE ENG SUFFERED A CATASTROPHIC FAILURE WITH A DEAFENING BANG. THE RPTR STATED THAT EVEN WITH THE ENG FAILURE THE ONLY WARNING LIGHT ILLUMINATED WAS THE 'CHIP' DETECTOR LIGHT, NO LOW OIL PRESSURE WARNING LIGHT OR OTHER INDICATIONS ASSOCIATED WITH AN ENG FAILURE. THE RPTR SAID MAINT RPTED THE ENG FAILURE WAS CAUSED BY THE FAILURE OF THE 'A-3' INTERNAL OIL SEAL ALLOWING ENG OIL TO CONTAMINATE THE BLEED AIR RESULTING IN SMOKE IN THE CABIN AND COCKPIT. THE RPTR SAID THE ENG WAS A GE CT7-9B2 AND WAS REPLACED AND SENT TO THE OVERHAUL SHOP.

Synopsis :
AN EMB120 ON APCH AT 6000 FT DECLARED AN EMER DUE TO SMOKE IN THE COCKPIT CAUSED BY THE R ENG LOSS OF OIL AND CATASTROPHIC FAILURE.

ACN: 420622

Time
Date : 199811
Day : Sat
Local Time Of Day : 0601 To 1200

Place
Locale Reference.Airport : ICT
Locale Reference.ATC Facility : ICT
State Reference : KS
Altitude.MSL.Bound Lower : 3100
Altitude.MSL.Bound Upper : 6000

Environment
Flight Conditions : VMC

Aircraft / 1
Make Model : Citation V

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 6100
Experience.Flight Time.Last 90 Days : 75
Experience.Flight Time.Type : 200
ASRS Report : 420622

Person / 2
Function.Flight Crew : First Officer

Events
Anomaly.Other Anomaly : Loss Of Aircraft Control
Independent Detector.Other.Flight CrewA : Unspecified
Resolutory Action.Flight Crew : Regained Aircraft Control

Narrative :
MISSION WAS BRIEFED AS AN EXPERIMENTAL FLT TEST OF A NEW MODEL CITATION. TEST WAS VMCA DYNAMIC. ACFT WAS EQUIPPED WITH A SPIN CHUTE WHICH WAS TESTED AND ARMED. BUILD-UP CONDITIONS HAD BEEN PERFORMED ON PREVIOUS FLTS. THIS FLT WAS TO BE THE FINAL CHK OF THE PREVIOUSLY DETERMINED MINIMUM CTL SPDS. CONDITION WAS FLOWN PER THE PREFLT BRIEFING WITH THE R ENG BEING SHUT DOWN AT 6000 FT MSL. INITIAL ACFT RESPONSE WAS AS EXPECTED, WITH RUDDER ADEQUATELY COUNTERING THE YAW. ACFT SUDDENLY DEPARTED IN YAW AND ENTERED A R SPIN. PLT REDUCED THRUST ON THE L ENG TO IDLE AND INPUT ANTI-SPIN CTLS. ACFT RECOVERED AFTER 2 TURNS AT 3100 FT. PLT RESTARTED R ENG, CLBED TO 8000 FT, PERFORMED A FLT CTL CHK, AND MADE AN UNEVENTFUL LNDG AT ICT. VMCA TESTING IS REQUIRED BY FAR 25. IT IS HAZARDOUS TESTING AND SHOULD BE REPLACED BY AIRBORNE DATA GATHERING AT LESS CRITICAL CONDITIONS WITH SIMULATION USED FOR THE FINAL POINT. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR STATED THAT THE INCIDENT OCCURRED DURING THE FLT TESTING PER FAR PART 25 FOR A DERIVATIVE OF THE CESSNA MODEL C560. THESE TESTS ARE NECESSARY IN ORDER TO ASSURE THAT THE ACFT WILL PASS THE FAA FLT TESTS WHEN GIVEN TO THEM FOR CERTIFICATION OF THE ACFT. SUBSEQUENT EXAMINATION OF THE REASON FOR LOSS OF CTL WAS DUE TO IMPROPER CTL INPUT BY THE FLC AND NOT THE ACFT DESIGN.

Synopsis :
RPTING CAPT LOST CTL OF AN EXPERIMENTAL CESSNA 560 (C560) DURING AN EXPERIMENTAL FLT TEST RESULTING IN A 2 TURN SPIN TO THE R PRIOR TO RECOVERY. THE TEST INVOLVED AN ENG OUT PROC AT MINIMUM CTL SPDS. THE C560 WAS MODIFIED FOR A NEW DERIVATIVE OF A PROPOSED NEW MODEL WHICH HAS NOT BEEN READY FOR FAA FLT TESTING.

ACN: 423719

Time
Date : 199812
Day : Tue
Local Time Of Day : 0001 To 0600

Place
Locale Reference.Airport : CLE
State Reference : OH
Altitude.AGL.Bound Lower : 0
Altitude.AGL.Bound Upper : 50

Environment
Flight Conditions : IMC

Aircraft / 1
Make Model : DC-3/Dakota/Skytrain

Person / 1
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 1624
Experience.Flight Time.Last 90 Days : 210
Experience.Flight Time.Type : 158
ASRS Report : 423719

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 15000
Experience.Flight Time.Last 90 Days : 315
Experience.Flight Time.Type : 3500
ASRS Report : 423355

Person / 3
Function.Controller : Local

Events
Anomaly.Other Spatial Deviation : Controlled Flight Towards Terrain
Anomaly.Conflict : Ground Critical
Anomaly.Inflight Encounter : Weather
Independent Detector.Other.Flight CrewA : Unspecified

Narrative :
WE DEPARTED PNE IFR TO SBN WITH 5280 LBS OF FREIGHT ABOARD. AS SIC WITH LOW TIME IN TYPE, I WAS LEAVING DECISIONS UP TO THE CAPT. WE ENCOUNTERED ICING CONDITIONS NEAR OHIO/PENNSYLVANIA BORDER. HVY ICE BEGAN TO BUILD ON THE ACFT AS WE CONTINUED ON AT 3500 FT. WE ACTIVATED THE ACFT'S DEICE EQUIP ONCE, FOR A SHORT PERIOD OF TIME. AS WE WERE NEAR CLEVELAND, I WAS NERVOUS OF CARRYING THE AMOUNT OF ICE, SO I SUGGESTED TO THE CAPT THAT WE LAND. WE WERE INTENDING ON LNDG AT TOLEDO FOR FUEL, WHICH WAS OVER AN HR AWAY AT THIS TIME, SO THE DIVERSION WOULD ALSO ALLOW US TO REFUEL. WE WERE GIVEN VECTORS TO ILS RWY 5R. WE INTERCEPTED THE LOC AT 8 MI (GPS) OUT. AS WE WERE ESTABLISHED, THE CAPT CALLED FOR GEAR DOWN BEFORE LNDG CHKLIST ITEMS. IT TOOK 3 CYCLES TO FINALLY GET A 'DOWN-LOCKED' INDICATION (PROBABLY DUE TO ICE BUILDUPS ON THE GEAR MECHANISMS). IN NORMAL CRUISE, TO HOLD ALT, WITH THE PWR SETTING AS WE SET IT BEFORE ENCOUNTERING ICE, THE AIRSPD DROPPED FROM THE NORMAL 125-130 KIAS TO 97-100 KIAS. ON SHORT FINAL, I WAS DOUBLECHKING THE BEFORE LNDG SHORT FINAL CHKLIST ITEMS, WHEN VERY SUDDENLY, THE ACFT DEPARTED IT STABLE APCH STATUS WITH VIOLENT PITCH AND ROLL CHANGES. THE CAPT YELLED 'I'M LOSING IT!' AT THIS POINT MY CFI INSTINCTS TOOK OVER. I TOOK THE CTLS AND REALIZED WE WERE IMMINENT TO A FULL STALL. IN ATTEMPTING TO REGAIN CTL, WE STRUCK THE GND AND OTHER OBSTRUCTIONS WITH THE WINGS AND EMPENNAGE. WE MANAGED TO CTL IT TO THE RWY AND LANDED. NO FURTHER INCIDENT. ACTUAL KNOWLEDGE OF IMPACTING GND AND OBSTRUCTIONS WAS OBTAINED DURING TAXI. SUPPLEMENTAL INFO FROM ACN 423355: ON FINAL IT TOOK 3 TRIES TO GET THE GEAR DOWN AND LOCKED WITH GREEN LIGHT BECAUSE OF ICE BUILDUP ON THE GEAR LOCKING MECHANISM. THIS DISTR CAUSED ME TO LOSE ENOUGH AIRSPD TO BE ON THE EDGE OF A STALL. THE WINGS ROCKED AND THE R ONE TOOK OUT PARTS OF THE ILS ANTENNA. THE ACFT WAS DAMAGED, BUT WE LANDED ON THE RWY WITHOUT DAMAGE TO THE ENGS, PROPS OR GEAR. WE TAXIED TO PARKING AND SHUT DOWN. THE ACFT WAS QUITE HVY WITH MOSTLY CLR ICE AND 5280 LBS OF FREIGHT. THERE WERE NO INJURIES TO ANYONE.

Synopsis :
DC3 CREW LOSES CTL OF ACFT DUE TO ICE BUILDUP AND STRIKES GND EQUIP ON APCH TO CLE.

ACN: 425239

Time
Date : 199901
Day : Thu
Local Time Of Day : 1201 To 1800

Place
Locale Reference.Airport : STL
State Reference : MO
Altitude.MSL.Bound Lower : 1600
Altitude.MSL.Bound Upper : 2200

Environment
Flight Conditions : IMC

Aircraft / 1
Make Model : ATR 42

Component / 1
Aircraft Component : Ice/Rain Protection System
Aircraft Reference : X
Problem : Design Deficiency

Person / 1
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 4000
Experience.Flight Time.Last 90 Days : 136
Experience.Flight Time.Type : 996
ASRS Report : 425239

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 15000
Experience.Flight Time.Last 90 Days : 161
Experience.Flight Time.Type : 161
ASRS Report : 426456

Person / 3
Function.Controller : Local

Events
Anomaly.Other Spatial Deviation : Controlled Flight Towards Terrain
Anomaly.Inflight Encounter : Weather
Independent Detector.Other.Flight CrewA : Unspecified
Resolutory Action.None Taken : Anomaly Accepted
Resolutory Action.Other : Flight Crew Executed Missed Approach Or Go Around
Consequence.FAA : Reviewed Incident With Flight Crew

Narrative :
ON THE ILS RWY 12R APCH TO STL, FLT ENCOUNTERED UNEXPECTED SEVERE ICING WHICH SUBSEQUENTLY CAUSED THE ACFT TO DEPART CTLED FLT. THE STALL/DEP INDICATIONS WERE CONSISTENT WITH A 'TAILPLANE STALL.' THIS RESULTED IN AN UNCTLED DSCNT BELOW THE APCH GS WHILE THE CREW WORKED DILIGENTLY TO RECOVER THE ACFT. THE CREW RECOVERED CTLED LEVEL FLT AT 1600 FT MSL AND MAINTAINED LEVEL FLT (ABOVE THE LOC MDA OF 960 FT MSL) TO A GS INTERCEPT. PRIOR TO GS INTERCEPT, THE CREW PERFORMED A NOMINAL CTL CHK AND FLEW A NORMAL LNDG AT VFE 30, 150 KIAS. DEP/RECOVERY: AS THE FLAPS EXTENDED TO 30 DEGS THE ACFT DISPLAYED A DRAMATICALLY INCREASING CRESCENDO OF HIGH FREQ CTL FLUTTER AND LOW FREQ AIRFRAME BUFFETING. AS THE FLAPS REACHED 30 DES, THE ACFT DECELERATED ABRUPTLY AND DEPARTED CTLED FLT. AT DEP, THE ACFT ROLLED L WING DOWN AND PITCHED DOWN 4 DEGS. (THE ESTIMATED 15 DEGS PER SECOND ROLL WAS UNCOMMANDED -- OPPOSITE THE 30-40 DEGS R CTL WHEEL INPUT. THIS ROLL WAS ARRESTED AT 10-12 DEGS L WING DOWN BY POSITIVE FORWARD STICK INPUT.) THE CREW RECOVERED THE ACFT BY APPLYING BASIC AIRMANSHIP: SIMULTANEOUSLY RESELECTING FLAPS 15 DEGS (CLB FLAPS), INCREASING PWR (+/-90% Q), AND APPLYING POSITIVE FORWARD STICK (+/-5 DEGS DOWN). CONCERNED THAT THE ROLL MAY BE TORQUE RELATED, THE CREW APPLIED MAX PWR (100% Q X 100% NP) AT ABOUT 165-170 KIAS. THE CAPT MAINTAINED R ROLL CTL WHEEL INPUT FROM THE ONSET UNTIL THE WINGS RESPONDED TO THE CTL WHEEL (APPROX 175 KIAS). AT 175-180 KIAS THE FO CHKED LEADING EDGES (GOOD AND IMPROVING) AND THE WINGS MATCHED THE WHEEL SO THE CAPT LEVELED THE ACFT VERY GRADUALLY (APPROX +1 DEG PER SECOND) FROM 1700-1600 FT MSL. INITIALLY THE ACFT REQUIRED 100% Q FOR LEVEL FLT AT 180 KIAS BUT AS THE ICE PROTECTION SYS FUNCTIONED, THE CAPT WAS ABLE TO RETARD PWR TO MAINTAIN 180 KIAS. THROUGHOUT THE RECOVER, THE CAPT'S CTL INPUTS WERE SMOOTH, STEADY AND STABLE WHILE THE ACFT RESPONSE WAS SLOW AND VERY SLUGGISH, ESPECIALLY ROLL AXIS, WITH THE PITCH SLOWLY OSCILLATING UNTIL LEVEL FLT WAS ACHIEVED. THE ENCOUNTER WITH SEVERE ICING WAS OF AN EXTREMELY BRIEF DURATION (ESTIMATED LESS THAN 1 SECOND) AND THE CREW HAD NO PRIOR AIRFRAME INDICATIONS (SIGNIFICANT SIDE WINDSHIELD SPATTERING OR PROP SPINNER ACCUMULATIONS GROWING AFT) NOR OTHER WARNINGS (ATIS, RADAR OR PIREP) THAT SEVERE ICING COULD BE EXPECTED OR MAY BE ENCOUNTERED. THE ACFT HAD BEEN CONTINUOUSLY OPERATED WITH ALL ANTI-ICE/DEICE SYS ON (LEVEL 3) DURING FLT IN ICING CONDITIONS. THE CREW HAD EXPERIENCED NO PROBS WITH ICING PRIOR TO THE UNEXPECTED ENCOUNTER WITH SEVERE ICING. THE FLT HAD CONDUCTED 1 PRIOR ILS RWY 12R APCH TO A MISSED APCH (FOR SEQUENCE). DURING THIS PREVIOUS APCH, THE CREW BRIEFLY OBSERVED MODERATE ICING AT 3000 FT MSL. ON COMMENCING THE SECOND APCH, THE ACFT HAD BEEN IN ICING CONDITIONS FOR APPROX 15-25 MINS AND HAD ACCUMULATED A TOTAL OF 1 INCH OF MIXED RIME. THE WINGS WERE CLR AND CLEAN PRIOR TO THE APCH. THE CREW WOULD LIKE TO CREDIT THE TRAINING DEPT FOR FORGING COCKPIT TEAMWORK DURING THE ANNUAL CHKRIDES, AND FOR INCLUDING PRACTICE STALLS DURING THE SVT. IN PARTICULAR, THANKS TO TRAINING FOR SYSTEMATICALLY REVIEWING WINTER OPS PROCS (INCLUDING TAILPLANE STALL INCIDENTS AND RECOVERY PROCS), DURING OUR ANNUAL ORAL EXAMS. THEIR VIGILANCE AND GOOD COACHING KEPT ATR, J32, AND J41 PLTS SHOP-TALKING ABOUT AND THUS AWARE OF ICING UPSETS AND RECOVERY. THE CREW WOULD ALSO THANK STL ATC WHO PASSED THE PIREPS, OBTAINED THE INFLT WX CONDITIONS AND GAVE US AN ALT ABOVE ICING CONDITIONS ON VECTORS TO OUR SECOND APCH. ON ANY GIVEN DAY, THEIR VIGILANCE AND ABSOLUTE PROFESSIONALISM IS AN AWESOME VIRTUE. ON THIS DAY, OUR PROBS WERE SUDDEN AND UNEXPECTED. THE CREW DIDN'T HAVE TIME TO DECLARE AN EMER OR TO COMMUNICATE MUCH ABOUT THE NATURE OF OUR CONDITION UNTIL THE ACFT WAS SAFE ON DECK. JUST TOO BUSY, WE COULDN'T COMMUNICATE MUCH. BUT STL ATC WAS PULLING ON THE SAME SET OF OARS WITH US, AND THAT WAS VERY GOOD HELP TO HAVE. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR SPOKE OF A FLUTTER IN THE CTLS AND A BUFFETING IN THE AIRFRAME AS THE FLAPS WERE EXTENDED TO 30 DEGS. AT THAT TIME THERE WAS A HIGH TWISTING ACTION. AS THE ACFT ROLLED L, THE NOSE WENT DOWN. IT TOOK FULL R AILERON INPUT TO STOP THE ROLL ALONG WITH NOSE DOWN INPUT ON THE STICK. 500-600 FT OF ALT WERE LOST AT THE TIME. AS SOON AS THE FLAPS WERE MOVED TO 15 DEGS THE CTL FLUTTER DECREASED AND PITCH CTL RETURNED TO NORMAL WITH ADDITION OF PWR. THE SIDE WINDOW HAD SUDDENLY GONE OPAQUE FROM ICE ACCUMULATION. ENOUGH VISIBILITY TO THE SIDE ALLOWED THE FLC TO VIEW THE WINGS, DETERMINING THAT THEY WERE CLR OF ICE. EACH PLT CAN SEE 2/3 OF THE WING. THE FLUTTER IS A RESULT OF ICING ON THE ELEVATOR. AS FLAPS GO TO 15 DEGS, THE FLUTTER STOPS. THIS WAS REINFORCED TO THE FLC DURING THEIR UPSET TRAINING BY THE ACR. THE FLC MISSED THE PRIOR APCH AND FLEW FOR 15-20 MINS IN IMC ICING CONDITIONS BEFORE BEGINNING THE SECOND APCH. CONDITIONS WERE RIGHT FOR PICKING UP ELEVATOR ICING. THE FLC SPOKE WITH THE NTSB FOR 3 HRS REGARDING THIS INCIDENT.

Synopsis :
AN ACR ATR42 FLYING AN INST APCH INTO STL, HAS A SUDDEN LOSS OF CTL DUE TO ICING. FLC RECOVERS ACFT FROM LOSS OF ALT AND LANDS SAFELY.

ACN: 425585

Time
Date : 199901
Day : Sat
Local Time Of Day : 1801 To 2400

Place
Locale Reference.Airport : MSP
State Reference : MN
Altitude.MSL.Bound Lower : 4000
Altitude.MSL.Bound Upper : 4000

Environment
Flight Conditions : IMC

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 10750
Experience.Flight Time.Last 90 Days : 230
Experience.Flight Time.Type : 900
ASRS Report : 425585

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Approach

Person / 4
Function.Oversight : PIC
Function.Flight Crew : Captain

Events
Anomaly.Conflict : Airborne Less Severe
Anomaly.Non Adherence : Published Procedure
Anomaly.Non Adherence : Required Legal Separation
Independent Detector.Other.Flight CrewA : Unspecified
Resolutory Action.Other : Flight Crew Executed Missed Approach Or Go Around

Narrative :
FLYING INBOUND TO MSP, ATC CLRED THE FLT FOR THE ILS RWY 12R AND THE APCH MODE WAS SELECTED AND THE MISSED APCH ALT WAS SET FOR 5000 FT. AROUND 9-10 NM FROM THE RWY, THE TCASII DISPLAYED POP-UP TFC 2-3 MI DIRECTLY IN FRONT OF US (200 FT LOWER). I HAD POINTED THIS OUT TO THE FO AND WAS ABOUT TO QUESTION ATC, BUT THE ACFT HAD EXPERIENCED A LIGHT BUZZ TURB FOLLOWED BY A SHARP R ROLL. I DISCONNECTED THE AUTOPLT AND WAS ABLE TO RECOVER, BUT THIS WAS FOLLOWED BY A VERY STRONG L ROLL. THIS L ROLL COULD ONLY BE SLOWED WITH THE FULL R APPLICATION OF THE AILERONS. IT SEEMED LIKE THE ACFT WAS CAUGHT IN WAKE TURB AND IT MAY ROLL OVER. IN AN ATTEMPT TO STRENGTHEN LATERAL CTL, I CAUTIOUSLY ADDED R RUDDER TO PICK UP THE L WING, BUT THIS FAILED TO RETURN THE WINGS TO A LEVEL ATTITUDE. THE ONLY POSSIBLE ESCAPE FROM THIS WAKE TURB SEEMED TO BE THROUGH THE VERT PLANE. I SLAMMED THE THRUST LEVERS FORWARD AND CLBED. THIS WORKED AND NORMAL FLT CTL WAS REGAINED. I ANNOUNCED TO ATC A GAR FOR WAKE TURB, AND DEMANDED 5000 FT. AFTER ENGAGING THE AUTOPLT, I FOUND OUT THAT THE POP-UP TFC WAS A B747 ON AN APCH TO RWY 12L. I TOLD THE CTLR THAT WE HAD EXPERIENCED UNCOMMANDED ROLLS DUE TO WAKE TURB AND THAT THE WINDS AT 4000 FT WERE FROM NE AT 45 KTS. THE FLT WAS REVECTORED FOR ANOTHER APCH AND LANDED WITHOUT FURTHER INCIDENT. I THINK THIS WAKE TURB ORIGINATED FROM THE B747'S TAIL PLANE -- WHICH WOULD ASCEND ABOVE ITS ALT AND CAUSE A R ROLL FIRST, FOLLOWED BY THE L ROLL. IF MY ASSUMPTION IS CORRECT, THE STRENGTH FROM A B747'S WING VORTEX WOULD BE A VERY DANGEROUS MATTER. I WOULD LIKE TO RESTATE: THIS ACFT COULD ONLY IMPEDE THIS L ROLL AND A VERT ESCAPE WAS REQUIRED TO REGAIN CTL OF THE ACFT. IN THE LAST 11 YRS OF FLYING AT THIS AIRLINE, I HAD ENCOUNTERED MANY TYPES OF WAKE TURB FROM VARIOUS ACFT, BUT NONE OF THIS PWR. ATC IS BRINGING ACFT CLOSER AND CLOSER THESE DAYS, PLACING CREWS AT MORE RISK FOR WAKE TURB ENCOUNTERS. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR PARTICIPATED IN THE WAKE TURB STRUCTURED CALLBACK PROGRAM. THE PRECEDING B747 DID NOT SHOW ON TCASII UNTIL SHORTLY BEFORE THE OCCURRENCE. WHEN IT DID SHOW, IT WAS ONLY 2-3 MI AWAY. RPTR ACFT WAS ABOUT 200 FT ABOVE THE B747 GLIDE PATH. RPTR THINKS THE WAKE WENT UPWARD AS A RESULT OF THE HORIZ STABILIZER FORCES OF THE B747. RPTR ACFT HAD 50 DEG ROLL TO THE R FOLLOWED BY A 60 DEG ROLL TO THE L. AILERON AND RUDDER WERE USED TO UPRIGHT THE ACFT. ONLY PARTIAL CTL WAS AVAILABLE. FLC EXECUTED A GAR AND PERFORMED ANOTHER ILS APCH. WHEN PARKED AT THE GATE, THE FO WAS STILL SHAKING. IT WAS A STRESSFUL INCIDENT.

Synopsis :
AN AVRO RJ85 (BA146) ENCOUNTERS WAKE TURB WHILE MAKING A PARALLEL APCH INTO MSP RWY 12R.

ACN: 426036

Time
Date : 199901
Day : Wed
Local Time Of Day : 1801 To 2400

Place
Locale Reference.Airport : ORD
State Reference : IL
Altitude.MSL.Bound Lower : 7000
Altitude.MSL.Bound Upper : 7000

Environment
Flight Conditions : Mixed

Aircraft / 1
Make Model : ATR 72

Component / 1
Aircraft Component : Aerofoil Ice System
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 2870
Experience.Flight Time.Last 90 Days : 210
Experience.Flight Time.Type : 750
ASRS Report : 426036

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 3
Function.Controller : Radar

Events
Anomaly.Inflight Encounter : Weather
Independent Detector.Other.Flight CrewA : Unspecified
Resolutory Action.Flight Crew : Overcame Equipment Problem
Resolutory Action.Flight Crew : Returned to Intended Course or Assigned Course
Consequence.FAA : Reviewed Incident With Flight Crew

Narrative :
PRIOR TO DEP, ACFT WAS DEICED WITH TYPE I AND TYPE IV FLUID. DURING CLBOUT, AILERONS FELT VERY STIFF. WE ENTERED IMC APPROX 3000-4000 FT AND WERE IN IMC CONDITIONS FOR APPROX 60-90 SECONDS. ONCE ON TOP AND WHEN THE ACFT WAS PROPERLY TRIMMED, I ENGAGED THE AUTOPLT WHILE STILL IN THE CLB. SEVERAL SECONDS LATER WE RECEIVED AN ANTI-ICE HORN (R SIDE) FAULT INDICATION. AFTER COMPLETING THE APPROPRIATE CHKLIST IN THE ACFT QRH, THE CAPT DISCUSSED OUR OPTIONS WITH COMPANY DISPATCH/MAINT AND WE DECIDED TO RETURN TO ORD. THE ACFT HAD ACCUMULATED VERY LIGHT RIME ICE IN THE CLB. AFTER TURNING BACK WBOUND APPROX 3-4 MINS LATER, WE EXPERIENCED AN UNCOMMANDED ROLL TO THE L ABOUT 20 DEGS WITH THE AUTOPLT ENGAGED. WE HAD JUST DSNDED FROM 9000 FT TO 7000 FT AND WE WERE LEVEL. DURING THE OCCURRENCE, WE WERE SLOWING FROM 240 KTS TO 210 KTS. WE LOST APPROX 200 FT OF ALT. I RECOVERED MANUALLY AND HAND FLEW THE REMAINDER OF THE FLT. THE CTLS FELT NORMAL FROM THE RECOVERY UNTIL LNDG. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE FLC RECEIVED AN ANTI-ICE HORN FAULT. FLC RECEIVED THE FAULT BY NOTING THE FAULT LIGHT WAS ON, CHIME SOUND, AND WRITTEN MESSAGE FROM THE MESSAGE PROMPTER THAT ANTI-ICE HAD FAILED. THIS FAULT MEANT THE HEAT TO THE R AILERONS OR RUDDER HAD FAILED. FLC CONTACTED THEIR DISPATCH AND DETERMINED THE BEST COURSE OF ACTION WOULD BE TO RETURN TO LAND AT THEIR DEP ARPT. WHEN TURNED BACK TO THE ARPT 3-4 MINS LATER, THE ACFT EXPERIENCED A ROLL OF 20 DEG BANK TO THE L. THE FO DISENGAGED THE AUTOPLT AND QUICKLY STOPPED THE ROLL. AUTOPLT WAS NEVER RE-ENGAGED FOR THE REMAINDER OF THE FLT. MANUAL CTL OF ACFT WAS FINE, THERE WERE NO PROBS USING MANUAL FLT CTLS. THE RPTR FELT THE ICING FAULT LIGHT WAS DELAYED. THAT ICE WAS FORMING BEFORE THE ICING FAULT INDICATIONS ILLUMINATED. THEREFORE, ICE HAD BEEN ACCUMULATING FOR THE PREVIOUS 10- 20 MIN PERIOD. PLT WAS ASKED IF THIS COULD HAVE BEEN CAUSED BY WAKE TURB. PLT STATED THAT IT DIDN'T FEEL LIKE WAKE TURB. THE FLC DID ASK APCH WHO THEY WERE FOLLOWING. THE REPLY WAS 'NO ONE.' THE COCKPIT VOICE RECORDER AND FLT DATA RECORDER WERE PULLED FROM THE ACFT FOR THE FOLLOWING INVESTIGATION WITH ALPA, FAA, NTSB AND COMPANY REPRESENTATIVES.

Synopsis :
AN ATR72 DEPARTING ORD, FLIES THROUGH CLOUDS TO VFR CONDITIONS. WHEN THE AUTOPLT IS ENGAGED, THE ACFT ENCOUNTERS A NON COMMANDED 20 DEG ROLL.

ACN: 426673

Time
Date : 199901
Day : Wed
Local Time Of Day : 1801 To 2400

Place
Locale Reference.Airport : ORD
State Reference : IL
Altitude.MSL.Bound Lower : 4000
Altitude.MSL.Bound Upper : 4000

Environment
Flight Conditions : VMC

Aircraft / 1
Make Model : Regional Jet Cl65

Aircraft / 2
Make Model : B757 Undifferentiated or Other Model

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 10200
Experience.Flight Time.Last 90 Days : 150
Experience.Flight Time.Type : 230
ASRS Report : 426673

Person / 2
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 2700
Experience.Flight Time.Last 90 Days : 120
Experience.Flight Time.Type : 175
ASRS Report : 427256

Person / 3
Function.Controller : Approach

Person / 4
Function.Oversight : PIC
Function.Flight Crew : Captain

Events
Anomaly.Non Adherence : Published Procedure
Independent Detector.Other.Flight CrewA : Unspecified
Resolutory Action.Other : Flight Crew Executed Missed Approach Or Go Around

Narrative :
THE CTLR PUT US 2 1/2 - 3 MI BEHIND A B757 WITHOUT CAUTIONING US. WE ASKED HIS ACFT TYPE AND CTLR SAID 'ACR X B727.' THE ACR X REPLIED 'B757.' THEN OUR ACFT BEGAN AN UNCTLED L ROLL TO APPROX 45-60 DEGS. THE AUTOPLT DISENGAGED AND WE RECOVERED TO STRAIGHT AND LEVEL. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR PARTICIPATED IN THE WAKE TURB CALLBACK STUDY. RPTR WAS CLOSE TO THE PRECEDING ACFT. HE THOUGHT IT WAS A B727 UNTIL THE PLT OF THE ACFT RPTED IT TO BE A B757. AT THAT TIME HE WAS ONLY 2 1/2 - 3 MI BEHIND. WHEN HE ENCOUNTERED THE WAKE HE DESCRIBED IT AS THE MOST FRIGHTENING EXPERIENCE HE HAS EVER HAD FLYING ANYTHING. THE BANK ROLL WENT TO 45 DEGS, DISENGAGING THE AUTOPLT. HE HAD PARTIAL CTL AND WAS ABLE TO RIGHT THE ACFT. A GAR WAS PERFORMED TO GET OUT OF THE WAKE. DURING FLC/ATC REVIEW, SUPVR STATED THE CTLR WOULD RECEIVE ADDITIONAL TRAINING. SUPPLEMENTAL INFO FROM ACN 427256: THE CAPT MADE VISUAL CONTACT WITH THE PRECEDING ACFT AND THIS PROMPTED HIM TO HAVE ME ASK APCH WHAT TYPE OF ACFT WE WERE FOLLOWING. THE APCH CTLR REPLIED, 'ACR X B727.' SHORTLY AFTER, A VOICE WITH A SPANISH ACCENT RESPONDED, 'B757.' WITHIN A FEW SECONDS, THE ACFT, WHICH WAS ON AUTOPLT AND COUPLED TO THE LOC, BEGAN AN UNCOMMANDED L BANK EXCEEDING 45-50 DEGS OF BANK. THE AUTOPLT DISENGAGED AND THE CAPT RECOVERED HDG 250 DEGS AND CLBING TO 5000 FT WHILE EXECUTING A GAR/MISSED APCH. THE CTLR NOTICED THIS AND CONFIRMED OUR GAR, ASSIGNING US A NEW HDG. I THEN QUESTIONED ATC TO VERIFY WHAT WE WERE FOLLOWING AND HE SAID 'B757.' WE THEN LANDED WITH NO FURTHER INCIDENT.

Synopsis :
A CL65 ENCOUNTERS WAKE TURB BEHIND A B757 DURING APCH AT ORD.

ACN: 429547

Time
Date : 199902
Day : Tue
Local Time Of Day : 0601 To 1200

Place
Locale Reference.ATC Facility : SBY
State Reference : MD
Altitude.MSL.Bound Lower : 33000
Altitude.MSL.Bound Upper : 33000

Environment
Flight Conditions : VMC

Aircraft / 1
Make Model : B737-200

Component / 1
Aircraft Component : Rudder
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Oversight : PIC
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 15000
Experience.Flight Time.Last 90 Days : 200
Experience.Flight Time.Type : 2000
ASRS Report : 429547

Person / 2
Function.Flight Crew : Captain
Experience.Flight Time.Total : 10000
Experience.Flight Time.Last 90 Days : 25
Experience.Flight Time.Type : 2000
ASRS Report : 429548

Person / 3
Function.Controller : Radar

Events
Anomaly.Aircraft Equipment Problem : Critical
Independent Detector.Other.Flight CrewA : Unspecified
Resolutory Action.Flight Crew : Declared Emergency
Resolutory Action.Other : Unspecified

Narrative :
FLT FROM MCO TO BDL. 33000 FT .67+ MACH NORMAL CRUISE. EXPERIENCED UNCOMMANDED ROLL TO R. FIRST NOTED BY DISPLACEMENT OF CTL WHEEL TO L WITH NO PLT INPUT. TOOK CTL OF ACFT, NOTED THAT RUDDER PEDALS DISPLACED TO R, R RUDDER FORWARD AND UNABLE TO CTR. MAINTAINED CLOSE TO LEVEL FLT WITH CONSIDERABLE L AILERON INPUT. DECLARED EMER, COMPLIED WITH PROCS IN QRH, BOTH PLTS COULD NOT CORRECT RUDDER. WHEN 'B' SYS HYD SWITCH PLACED TO STANDBY RUDDER, RUDDERS CTRED AND CONTROLLABLE. DURING APCH NOTED VIBRATION IN RUDDER PEDALS AND SOME RUDDER 'KICKS.' UNEVENTFUL LNDG BWI, RWY 33L. MADE APPROPRIATE LOGBOOK ENTRY. SUPPLEMENTAL INFO FROM ACN 429548: I DECLARED AN EMER WITH ATC. IMMEDIATE ACTION ITEMS CONSISTING OF AUTOPLT, AUTOTHROTTLES AND YAW DAMPER WERE TURNED OFF. BOTH PLTS ATTEMPTED TO MOVE JAMMED RUDDER PEDALS. NO DESIRED MOVEMENT OBSERVED. QRH PROCS COMPLIED WITH. RUDDERS WERE FREED UP WHEN 'B' SYS HYD SYS FLT CTL SWITCH WAS PLACED TO STANDBY RUDDER POS. CALLBACK CONVERSATION WITH RPTR ON ACN 429547 REVEALED THE FOLLOWING INFO: THE RPTR SAID THAT THE CAPT WAS FLYING THE ACFT ON AUTOPLT AT THE TIME OF THE RUDDER DISPLACEMENT AND THE RPTR ATTEMPTED TO ASSIST WHEN THE R RUDDER PEDAL WENT, FULL TRAVEL, FORWARD. THEN AS THE FLC STARTED THROUGH THEIR UNCOMMANDED RUDDER INPUT CHKLIST THIS RPTR ASSUMED CTL OF THE ACFT. THIS RPTR HAS SPOKEN TO MAINT PERSONNEL AND THEY HAVE BEEN UNABLE TO DISCOVER THE CAUSE FOR THE RUDDER DISPLACEMENT. THE ACFT HAD ONE OF THE NEW RUDDER CTL VALVES INSTALLED AND IT WAS IN PROPER WORKING ORDER ACCORDING TO MAINT. CALLBACK CONVERSATION WITH RPTR ON ACN 429548 REVEALED THE FOLLOWING INFO: THIS RPTR SAID THAT WITH BOTH FLC PUSHING ON THE OPPOSITE RUDDER PEDAL THEY WERE UNABLE TO CORRECT THE R RUDDER DISPLACEMENT. HOWEVER, HE WAS ABLE TO MAINTAIN LEVEL FLT BY USING ALMOST FULL L AILERON INPUT. HE SAID THAT AS SOON AS HE PLACED THE 'B' SYS HYD SWITCH TO THE 'STANDBY RUDDER' POS THE RUDDER BECAME CONTROLLABLE AGAIN.

Synopsis :
THIS ACR B737-200 FLC EXPERIENCED AN UNCOMMANDED RUDDER DISPLACEMENT THAT CAUSED THE ACFT TO ROLL TO THE R. INITIALLY, THE FLC WAS UNABLE TO OVERPOWER THE UNCOMMANDED INPUT, BUT WERE ABLE TO MAINTAIN APPROX LEVEL FLT BY XCTLING THE ACFT.

ACN: 429946

Time
Date : 199903
Day : Wed
Local Time Of Day : 0601 To 1200

Place
Locale Reference.Airport : PIT.Airport
State Reference : PA
Altitude.AGL.Single Value : 1800

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.Tower : PIT.Tower
Make Model : B757-200

Component / 1
Aircraft Component : Turbine Engine
Aircraft Reference : X
Problem : Failed

Person / 1
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 11500
Experience.Flight Time.Last 90 Days : 120
Experience.Flight Time.Type : 1800
ASRS Report : 429946

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 3
Function.Controller : Local

Events
Anomaly.Aircraft Equipment Problem : Critical
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Landed In Emergency Condition
Resolutory Action.Other : Return / Land

Supplementary
Problem Areas : Aircraft
Problem Areas : Environmental Factor

Narrative :
SINCE THE RWYS WERE RPTED NOT DRY, WE USED FULL PWR FOR TKOF, WHICH WAS NORMAL. AT 1200 FT WE SELECTED CLB THRUST AND BEGAN CLEANING UP OUR FLAPS. AT 1500 FT THERE WAS A SERIOUS VIBRATION AND YAWING TO THE R. THE ENG READINGS VERIFIED A R ENG FAILURE DUE TO EGT EXCEEDED LIMITS AND DROPPING N1. AN EMER WAS DECLARED FOR A RETURN TO THE FIELD. THE CAPT CONTINUED TO CTL THE ACFT WELL AS I FOLLOWED THE ENG FAILURE CHKLIST, COMMUNICATED WITH THE TWR, SPOKE BRIEFLY WITH THE FLT ATTENDANT. INSUFFICIENT TIME REMAINED TO TALK OVER THE PA SYS TO THE PAX, BUT SINCE I WAS MONITORING THE PA ALSO, I HEARD THE LEAD FLT ATTENDANT ANNOUNCE THAT WE HAD LOST PWR ON 1 ENG AND WERE RETURNING TO THE ARPT. AN UNEVENTFUL LNDG WAS MADE AND I MADE AN ANNOUNCEMENT TO THE PAX TO REMAIN SEATED SINCE THERE WAS NO EVIDENCE OF FIRE OR A NEED TO EVAC THE ACFT. ONCE WE CLRED THE RWY, THE ACFT WAS STOPPED SO THE FIRE CREW COULD EXAMINE THE ACFT FOR FIRE OR IMMEDIATE DANGER. NONE WAS FOUND AND THE ACFT WAS SUCCESSFULLY TAXIED TO THE GATE WHERE THE PAX WERE DEPLANED. IN RETROSPECT, I CAN SEE THAT ALLOWING YOURSELF PLENTY OF TIME TO ACCOMPLISH ALL PROCS CALLED FOR, SUCH AS EXCHANGING FLYING DUTIES TO THE FO SO THE CAPT MAY MANAGE THE SIT BETTER, CAPT READING EMER CHKLISTS, NOTIFYING PAX, COMPANY AND ATC ETC, IS NOT ALWAYS NECESSARY SINCE NOT ALL EMERS FIT PRECISELY INTO HOW WE ARE TRAINED. I STILL FEEL THAT THE AIRLINE'S TRAINING IS SUPERIOR THOUGH, AND BECAUSE OF IT, WE WERE SUCCESSFUL AS A FLC IN SAFELY HANDLING THIS EMER.

Synopsis :
A B757 USING FULL PWR THRUST FOR TKOF EXPERIENCES A FAILURE OF THE R ENG AT 1800 FT AGL.

ACN: 430225

Time
Date : 199903
Day : Mon
Local Time Of Day : 1801 To 2400

Place
Locale Reference.Airport : DFW.Airport
State Reference : TX
Altitude.AGL.Single Value : 300

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.TRACON : D10.TRACON
Controlling Facilities.Tower : DFW.Tower
Make Model : Fokker 100

Aircraft / 2
Controlling Facilities.TRACON : D10.TRACON
Controlling Facilities.Tower : DFW.Tower
Make Model : Commercial Fixed Wing

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
ASRS Report : 430225

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 4
Function.Controller : Approach

Person / 5
Function.Controller : Local

Events
Anomaly.Inflight Encounter : Wake Turbulence
Independent Detector.Other.Flight CrewA : 1
Resolutory Action.Flight Crew : Executed Go Around
Consequence.Other : Company Review

Supplementary
Problem Areas : ATC Human Performance
Problem Areas : Weather

Narrative :
I WAS HAND-FLYING VISUAL APCH TO RWY 17C AT DFW AT NIGHT WITH GOOD WX WITH A COMPUTER WIND ON NAV DISPLAY SHOWING A L QUARTERING TAILWIND OF AROUND 010/09 KTS AT 3000 FT. APCH ASKED US OUR GND SPD NUMEROUS TIMES AND KEPT SLOWING US AND SAID WINDS WERE REAL WEIRD THAT NIGHT. WE WERE FOLLOWING TFC ABOUT 4 MI AHEAD. WE WERE CLRED FOR APCH AND WENT TO TWR. TWR CLRED US TO LAND, AND SURFACE WINDS WERE RPTED LIGHT OUT OF THE S. APCH WAS SMOOTH WITH NO TURB. AT ABOUT 300 FT AGL, ACFT BEGAN AN UNCOMMANDED ROLL TO THE R. I TRIED TO COMPENSATE, BUT ROLL CONTINUED. ACFT THEN BEGAN TO SNAP BACK IN THE OTHER DIRECTION. IT FELT LIKE A CLASSIC WAKE VORTEX ROLL. I IMMEDIATELY APPLIED GAR PWR AND CLBED OUT OF THE WAKE. WE WENT STRAIGHT AHEAD, CLBED OUT, AND RETURNED FOR ANOTHER APCH. APCH ASKED US IF WE WOULD THEN LAND BEHIND A B757 ON RWY 17C AND WE POLITELY SAID NO THANKS. WE TOOK RWY 17L AND LANDED NORMALLY. WE DO NOT KNOW IF THE TFC WE WERE FOLLOWING ORIGINALLY WAS AN S80 OR A B757 -- BUT AN UNCOMMANDED ROLL AT 200-300 FT, IT DIDN'T REALLY MAKE ANY DIFFERENCE -- A GAR WAS THE ONLY OPTION. I WILL CERTAINLY TAKE HEED WHEN APCH AND TWR ARE RPTING SO CALLED WEIRD WINDS, EVEN THOUGH SURFACE WINDS ARE LIGHT AND SEEMINGLY BENIGN. WE NEVER WERE BELOW THE GS. SO WHERE THESE VORTICES CAME FROM, I WILL NEVER KNOW.

Synopsis :
AN AIRLINE FOKKER F100 CREW HIT WAKE TURB, OF UNKNOWN ORIGIN, WHILE ON SHORT FINAL APCH. THE CREW PERFORMED A GAR THEN RETURNED FOR A SUCCESSFUL LNDG.

ACN: 430736

Time
Date : 199903
Day : Thu
Local Time Of Day : 1201 To 1800

Place
Locale Reference.Airport : AZO.Airport
State Reference : MI
Altitude.MSL.Single Value : 6000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.TRACON : AZO.TRACON
Make Model : DC-9 30

Component / 1
Aircraft Component : Leading Edge Slat
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 12500
Experience.Flight Time.Last 90 Days : 210
Experience.Flight Time.Type : 3500
ASRS Report : 430736

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Approach

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Maintenance Problem : Improper Maintenance
Anomaly.Other Anomaly : Unstabilized Approach
Independent Detector.Other.Flight CrewA : 1
Resolutory Action.Flight Crew : Declared Emergency
Resolutory Action.Flight Crew : Diverted To Another Airport
Resolutory Action.Flight Crew : Overcame Equipment Problem
Resolutory Action.Controller : Issued New Clearance
Resolutory Action.Other : Retrated Slate
Consequence.Other : Maintenance Action

Supplementary
Problem Areas : Aircraft
Problem Areas : Maintenance Human Performance

Narrative :
FLT WAS FROM DETROIT, MI, TO KALAMAZOO, MI. SLATS WERE EXTENDED ON ARR INTO AZO APCH AIRSPACE TO BEGIN CONFIGN FOR LNDG. AS SLATS EXTENDED, ACFT EXPERIENCED LIGHT TO MODERATE TENDENCY TO ROLL TO THE R. SLAT DISAGREEMENT LIGHT WAS ILLUMINATED. PERFORMED COMPANY'S PROC FOR SLAT DISAGREEMENT, SLATS RETRACTED AND ROLL STOPPED. DUE TO INCREASED RWY LENGTH REQUIREMENTS, AND THAT WE ONLY HAD 1 HR OF FUEL ON BOARD, AN EMER WAS DECLARED AND WE RETURNED TO DTW. LNDG WAS UNEVENTFUL WITH EQUIP STANDING BY. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR STATED THE ACFT HAD A MAINT HISTORY OF SLAT PROBS. THE RPTR SAID THE CORRECTIVE ACTION ON THE FIRST RPT WAS LUBRICATION OF THE SLAT TRACKS. THE RPTR SAID THE SECOND FIX WAS REPLACEMENT OF THE SLAT TRACK SLIDING SEAL. THE RPTR STATED THESE FIXES WERE NOT EFFECTIVE. THE RPTR SAID THE CORRECTIVE ACTION IS UNKNOWN DUE TO LACK OF INFO FROM MAINT.

Synopsis :
A DC9-30 ON DSCNT AT 6000 FT DECLARED AN EMER AND DIVERTED DUE TO THE ACFT ROLLING TO THE R WITH THE SLATS EXTENDED AND SLAT DISAGREEMENT LIGHT ILLUMINATED.

ACN: 430834

Time
Date : 199903
Day : Fri
Local Time Of Day : 0601 To 1200

Place
State Reference : MD
Altitude.MSL.Bound Lower : 25000
Altitude.MSL.Bound Upper : 25300

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.ARTCC : ZDC.ARTCC
Make Model : Learjet 25

Component / 1
Aircraft Component : Main Gear Door
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 8000
Experience.Flight Time.Last 90 Days : 75
Experience.Flight Time.Type : 5200
ASRS Report : 430834

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Radar

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Altitude Deviation : Excursion From Assigned Altitude
Anomaly.Non Adherence : Clearance
Anomaly.Other Anomaly : Loss Of Aircraft Control
Independent Detector.ATC Equipment.Other ATC Equipment : Radar
Independent Detector.Other.ControllerA : 3
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Regained Aircraft Control
Resolutory Action.Controller : Issued New Clearance
Resolutory Action.Aircraft : Equipment Problem Dissipated
Resolutory Action.Other : Reduce Airspeed
Consequence.Other : Aircraft Damaged
Consequence.Other : Maintenance Action

Supplementary
Problem Areas : Aircraft
Problem Areas : Environmental Factor

Narrative :
LEVEL AT FL250. CTR ASKED FOR BEST FORWARD SPD (350 KIAS). ACCELERATING THROUGH +/-330 KTS, ACFT SHOOK, PITCHED UP, AND MAIN GEAR DOORS UNLOCKED LIGHTS CAME ON. PWR REDUCED TO REDUCE AIRSPD, BUT PITCH UP CAUSED US TO +/-200 FT HIGH. CTR QUESTIONED OUR ALT. DO NOT THINK WE GOT MORE THAN 200 FT HIGH, BUT WE MAY HAVE. AS ACFT SLOWED, WE INFORMED CTR OF OUR PROB. THEY BROKE OUT ALL TFC THAT WAS FOLLOWING US ON THE STAR, WE CONTINUED TO SLOW TO APPROX 200 KIAS (GEAR EXTENDED/RETRACT SPD -- VLE). CYCLED GEAR DOWN -- 3 GREENS. WITH MAIN GEAR DOOR UNLOCKED, LIGHTS STILL ON, ELECTED TO RETRACT GEAR. STILL HAD 2 RED GEAR DOOR LIGHTS. CONTINUED TO DEST AT REDUCED SPD (HAD TO BURN FUEL TO MAKE LNDG WT. OTHERWISE, WE WOULD HAVE GONE TO CLOSEST ARPT). IN DSCNT, RED LIGHTS WENT OUT WITHOUT CREW INTERVENTION. AT DEST, SELECTED GEAR DOWN, ALL SYS NORMAL. HAD MAINT INSPECT GEAR SYS. FOUND GEAR DOOR HINGES BENT (FROM AIRLOADS?) BUT COULD NOT FIND ANY OTHER PROBS. PLAN TO REPLACE GEAR DOOR SELECTOR VALVE TO PRECLUDE RECURRENCE EVEN THOUGH WE COULD NOT DUPLICATE THE PROB.

Synopsis :
AN LR25 FLC EXPERIENCES MAIN GEAR DOORS OPENING NEAR MAX CRUISE SPD AT FL250. ACFT PITCHES UP AS A RESULT OF PARTIAL OPENING OF DOORS.

ACN: 431445

Time
Date : 199903
Day : Tue
Local Time Of Day : 0001 To 0600

Place
Locale Reference.Airport : AFW.Airport
State Reference : TX
Altitude.MSL.Bound Lower : 3000
Altitude.MSL.Bound Upper : 3450

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.TRACON : D10.TRACON
Make Model : B727 Undifferentiated or Other Model

Component / 1
Aircraft Component : Approach Coupler
Aircraft Reference : X
Problem : Improperly Operated

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 20000
Experience.Flight Time.Last 90 Days : 110
Experience.Flight Time.Type : 4270
ASRS Report : 431445

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Flight Crew : Second Officer

Person / 4
Function.Controller : Approach

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Altitude Deviation : Excursion From Assigned Altitude
Anomaly.Non Adherence : Clearance
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Overcame Equipment Problem

Supplementary
Problem Areas : Aircraft
Problem Areas : Flight Crew Human Performance

Narrative :
ON A SCHEDULED FLT FROM IAH-AFW WITH FO FLYING, WE WERE CONDUCTING A CAT II SYS CHK TO RWY 16L AT AFW. WE WERE VMC AND LEVEL AT 3000 FT MSL WHEN GIVEN THE FINAL INTERCEPT HDG TO INTERCEPT THE LOC AND TOLD TO MAINTAIN 3000 FT UNTIL ESTABLISHED. AT THIS POINT WE BOTH SWITCHED OUR FLT DIRECTORS TO APCH MODE. THE FO SWITCHED TO APCH MODE ON AUTOPLT SELECTOR. ACFT STARTED A VIOLENT PITCH UP AND I TOLD FO TO DISCONNECT AND WATCH AIRSPD. HE WAS SLOW TO DO SO AND WE HAD CLBED 450 FT (3450 FT) BEFORE WE HAD ACFT LEVELED OFF. WE RETURNED ACFT TO 3000 FT AND RE-ENGAGED AUTOPLT. AUTOPLT PERFORMED NORMALLY AND A SUCCESSFUL APCH WAS COMPLETED. I THINK THE FO MAY HAVE SWITCHED AUTOPLT SELECTOR THROUGH THE AUTO APCH MODE TO MANUAL GS MODE CAUSING THE ACFT TO PITCH UP TO TRY AND GET TO GS (WE WERE BELOW IT). I CAUTIONED HIM TO BE CAREFUL ABOUT THIS ON RE-ENGAGE AND HE ACKNOWLEDGED HE WOULD AND THAT HE MAY HAVE SWITCHED TO MANUAL GS THE FIRST TIME. SINCE IT WAS A TEST OF THE AUTOPLT, I THINK WE BOTH ALLOWED AUTOPLT TO PITCH ACFT MORE THAN NORMAL TO SEE WHAT IT WOULD DO AND SEE IF IT WOULD CORRECT BACK. THERE WAS NO OTHER TFC IN IMMEDIATE AREA AND APCH MADE NO COMMENT ABOUT ALT. AS CAPT, NEXT TIME I WILL NOT ALLOW ACFT TO DEVIATE SO MUCH, EVEN IN A TEST SIT.

Synopsis :
FLC OF A CARGO B727 INADVERTENTLY CLBED FROM ASSIGNED ALT DURING INTERCEPT FOR A CAT II ILS APCH WHEN THE FO INADVERTENTLY ENGAGED THE AUTOPLT COUPLER IN THE MANUAL GS MODE INSTEAD OF THE AUTO APCH MODE. CORRECTION WAS MADE BACK TO ASSIGNED ALT AND THERE WAS NO COMMENT FROM ATC AS IT WAS EARLY MORNING HRS WITH NO OTHER TFC.

ACN: 431452

Time
Date : 199903
Day : Wed
Local Time Of Day : 1201 To 1800

Place
Locale Reference.ATC Facility : LIT
State Reference : AR
Altitude.MSL.Bound Lower : 35000
Altitude.MSL.Bound Upper : 35300

Environment
Flight Conditions : VMC

Aircraft / 1
Make Model : B737-200

Component / 1
Aircraft Component : Leading Edge Flap
Aircraft Reference : X
Problem : Malfunctioning

Component / 2
Aircraft Component : Leading Edge Slat
Aircraft Reference : X
Problem : Malfunctioning

Component / 3
Aircraft Component : Altimeter
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 2500
Experience.Flight Time.Last 90 Days : 50
Experience.Flight Time.Type : 50
ASRS Report : 431452

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 3
Function.Controller : Radar

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Altitude Deviation : Excursion From Assigned Altitude
Anomaly.Non Adherence : FAR
Independent Detector.Other.ControllerA : Unspecified
Independent Detector.Other.Flight CrewA : Unspecified
Resolutory Action.Other : Controller Intervened

Narrative :
WHILE AT CRUISE AT FL350, OUR ACFT DISENGAGED THE AUTOPLT AND LOCKED OUT THE AUTOPLT FROM BEING RE-ENGAGED. I (PF) STARTED HAND FLYING. WE ALSO GOT A LEADING EDGE FLAPS AMBER IN TRANSIT LIGHT WITH A SLIGHT ROLL TO THE R -- EASILY COUNTERED WITH AILERON/RUDDER. ALL GAUGES FOR FLAPS (TEF) AND LEADING EDGE FLAPS INDICATED NORMAL, BUT ROLL WAS COMING FROM SOMEWHERE. CAPT'S AND COPLT'S ALTIMETERS WERE NOTICED TO BE 200-250 FT DIFFERENT. I FLEW LEVEL FLT ON THE CAPT'S ALTIMETER. ZME QUERIED OUR ALT WHICH THEY RPTED FL353, WHICH WAS THE FO'S ALTIMETER SETTING. AFTER A COUPLE MORE CHKS WITH CTR, WE DECIDED TO FLY OFF THE FO'S SIDE. UNEVENTFUL REST OF THE FLT. WE FEEL THAT AN ELECTRICAL HICCUP CAUSED THE MALFUNCTION SOMEHOW. OUR PERFORMANCE DATA COMPUTER HAS REPEAT WRITE- UPS IN THE BOOK. RELATED? LEADING EDGE FLAPS LIGHTS DISENGAGING THE AUTOPLT? OUR MAINT COORD DID NOT HAVE AN ANSWER. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR SAID THAT THE MAINT PERSONNEL NEVER TOLD HIM WHAT CAUSED THE LEADING EDGE DEVICE TO DEPLOY OR THE CAPT'S ALTIMETER TO SUDDENLY MALFUNCTION. HE SAID THAT WHEN THE FLC ATTEMPTED TO DETERMINE WHICH LEADING EDGE DEVICE WAS UNLOCKED THE INDIVIDUAL DEVICE DISPLAY SHOWED EVERYTHING WAS NORMAL. HOWEVER, THE AMBER LEADING EDGE DEVICE IN TRANSIT LIGHT REMAINED ON AND THE ACFT STILL HAD A ROLL MOMENT TO THE R.

Synopsis :
AN ACR B737-200 FLC HAS AN AMBER LEADING EDGE DEVICE IN TRANSIT LIGHT ILLUMINATE AND THE ACFT STARTED TO ROLL TO THE R. SEVERAL OTHER, APPARENTLY RELATED, MALFUNCTIONS OCCURRED AT THE SAME TIME, BUT THE FLC WAS ABLE TO CONTINUE TO THEIR DEST.

ACN: 431544

Time
Date : 199903
Day : Sun
Local Time Of Day : 1201 To 1800

Place
Locale Reference.Airport : PIT.Airport
State Reference : PA
Altitude.MSL.Single Value : 3000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.Tower : PIT.Tower
Make Model : B737-400

Component / 1
Aircraft Component : Leading Edge Slat
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 18000
Experience.Flight Time.Last 90 Days : 180
Experience.Flight Time.Type : 4000
ASRS Report : 431544

Person / 2
Function.Oversight : PIC
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Local

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Other Spatial Deviation : Track Or Heading Deviation
Anomaly.Non Adherence : Clearance

Supplementary
Problem Areas : Aircraft
Problem Areas : Flight Crew Human Performance

Narrative :
WE WERE PERFORMING AN ILS APCH TO RWY 10L AT PIT WITH THE AUTOPLT COUPLED. AFTER THE FLAPS WERE SELECTED TO 'FLAPS 5 DEGS' WE NOTICED THAT WE HAD 2 AMBER LIGHTS: 1) LEADING EDGE FLAPS TRANSIT LIGHT ON THE FORWARD PANEL. 2) #5 SLAT TRANSIT LIGHT ON THE OVERHEAD ANNUNCIATOR. THERE WAS NOT ENOUGH TIME TO TROUBLESHOOT THE PROB. THEREFORE, WE SELECTED TO GO AROUND. ATC GAVE US A STRAIGHT AHEAD CLB TO 3000 FT MSL. LATER, WERE TURNED TO 360 DEGS THEN LATER TO 280 DEGS. WE WERE LEVEL AT 3000 FT MSL AND IN THE TURN TO 280 DEGS WHEN THE PF TURNED ON THE AUTOPLT. SINCE WE WERE LEVEL AT 3000 FT MSL AND TURNING DOWNWIND, I REQUESTED THAT THE FO GIVE A PA. DURING THE TURN TO 280 DEGS, MY ATTN WAS DRAWN AWAY FROM THE DIRECTIONAL GYRO. WHEN LOOKING BACK TO FORWARD PANEL, WE HAD PASSED THE 280 DEG HDG. I TURNED OFF THE AUTOPLT AND WAS IN A TURN BACK TO 280 DEGS WHEN ATC ASKED OUR HDG. WE TOLD THEM THAT WE WERE IN A TURN BACK TO THE R. ATC TURNED US TO 360 DEGS THEN LATER GAVE US A CLB CLRNC TO 4000 FT MSL. DURING THE PROCESS OF CLEANING UP THE ACFT DURING THE MISSED APCH, THE WARNING LIGHTS EXTINGUISHED AT FLAPS 1 DEGS. WE CONTINUED DOWNWIND AT FLAPS 1 DEG AND EXECUTED ANOTHER APCH WITHOUT ANY MORE COMPLICATIONS. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR STATED ON THE DOWNWIND LEG OF THE SECOND APCH THE LEADING EDGE FLAP/SLAT WARNING LIGHTS WENT OUT. THE RPTR SAID THE WARNINGS WERE FALSE AS NO ROLL WAS EVIDENT WHEN THE LIGHTS WERE ILLUMINATED. THE RPTR SAID THE FLAP/SLAT WARNING LIGHTS WERE WRITTEN UP IN THE LOGBOOK BUT IS NOT SURE WHAT ACTION MAINT HAS TAKEN TO CORRECT THE POS WARNING.

Synopsis :
A B737-400 ON APCH AT 3000 FT HAD TO MAKE A GAR DUE TO A LEADING EDGE FLAP SLAT POS WARNING.

ACN: 432032

Time
Date : 199903
Day : Sun
Local Time Of Day : 1801 To 2400

Place
Locale Reference.Airport : BUF.Airport
State Reference : NY
Altitude.MSL.Single Value : 35000

Environment
Flight Conditions : IMC

Aircraft / 1
Controlling Facilities.ARTCC : ZOB.ARTCC
Make Model : DC-9 10

Component / 1
Aircraft Component : Elevator ControlSystem
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 10500
Experience.Flight Time.Last 90 Days : 200
Experience.Flight Time.Type : 2025
ASRS Report : 432032

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 3
Function.Controller : Radar

Events
Anomaly.Aircraft Equipment Problem : Critical
Independent Detector.Other.Flight CrewA : 1
Resolutory Action.Flight Crew : Diverted To Another Airport
Resolutory Action.Controller : Issued New Clearance
Resolutory Action.Aircraft : Equipment Problem Dissipated
Consequence.Other : Maintenance Action

Situations
Aircraft.Make Model.Value : 583.31
Aircraft.Aircraft Component.Value : 27.32

Supplementary
Problem Areas : Aircraft
Problem Areas : Environmental Factor
Problem Areas : Weather

Narrative :
DURING CLB AND LEVELOFF AT ALT, AUTOPLT SHOWED OUT OF TRIM SIT AND FAILED. IT WAS DETERMINED, AFTER SEVERAL ACFT OSCILLATIONS FROM 1000 FPM CLB TO 4000 FPM CLB THEN LEVEL AT FL350 +/-100 FT WITH VSI FLUCTUATING, THAT THE ACFT ELEVATORS WERE NOT FUNCTIONING. THE ACFT PITCH WAS ONLY BEING CTLED BY THE TRIM. AFTER SOME DIFFICULTY, WE WERE ABLE TO FLY THE ACFT STRAIGHT AND LEVEL USING THE ALTERNATE TRIM, WHICH RUNS AT A SLOWER RATE THAN THE PRIMARY TRIM. DETERMINED POSSIBLE CAUSE WAS ICE BUILDUP AND ELEVATOR CTL CABLE IN TAIL SECTION OF ACFT. STARTED APU AND RAN AIRFOIL ANTI-ICE TO TRY TO WARM TAIL SECTION. EVALUATED ARPTS FOR EMER LNDG WITH NO ELEVATOR CTL WITHIN FUEL LIMITS BASED ON TEMP AT SURFACE AND FREEZING LEVELS AND XWIND COMPONENTS AND RWY LENGTHS. ARPTS INCLUDED BUF, CLE, CVG, IND, IIU, DTW, GRR, MKE. (NOTE: EAST COAST WX GUSTY WINDS AND HVY RAIN -- THEY WERE NOT GOOD CONSIDERATIONS. FLT DEPARTED EWR ENRTE TO MKE.) AFTER EVALUATING WX, IT WAS DETERMINED MKE WAS THE BEST DUE TO A FREEZING LEVEL OF 7000 FT, AND SURFACE TEMPS +4 DEGS C, LIGHT WINDS FROM N, DOWN RWY 1L. STARTED DSCNT OVER FNT TO GET INTO WARMER AIR. AT 7800 FT WITH RAM AIR TEMP -1 DEG C, 40 NM E OF MKE, ELEVATOR CTL WAS RE-ESTABLISHED AS AVAILABLE. LANDED WITHOUT INCIDENT. THE NTSB AND FAA HAVE BEEN NOTIFIED! ICE ACCUMULATION WAS FOUND IN TAIL SECTION OF ACFT BY MAINT.

Synopsis :
A DC9-15 ON LEVELOFF AT FL350 HAD ELEVATOR AND ELEVATOR PITCH TRIM FAILURE CAUSED BY ELEVATOR CABLE ICING.

ACN: 432076

Time
Date : 199903
Day : Mon
Local Time Of Day : 0601 To 1200

Place
State Reference : MD
Altitude.MSL.Bound Lower : 25000
Altitude.MSL.Bound Upper : 25300

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.ARTCC : ZDC.ARTCC
Make Model : Learjet 25

Component / 1
Aircraft Component : Gear Extend/Retract Mechanism
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 1480
Experience.Flight Time.Last 90 Days : 56
Experience.Flight Time.Type : 250
ASRS Report : 432076

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 3
Function.Controller : Radar

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Altitude Deviation : Excursion From Assigned Altitude
Anomaly.Non Adherence : Clearance
Anomaly.Other Anomaly : Loss Of Aircraft Control
Independent Detector.ATC Equipment.Other ATC Equipment : Radar
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Regained Aircraft Control
Resolutory Action.Flight Crew : Returned To Original Clearance
Resolutory Action.Controller : Issued New Clearance
Resolutory Action.Aircraft : Equipment Problem Dissipated
Resolutory Action.Other : Reduced Speed
Consequence.Other : Maintenance Action

Supplementary
Problem Areas : Aircraft

Narrative :
CRUISING AT FL250 ON A TRIP FROM NORFOLK TO TETERBORO WITH NO PROBS AND AUTOPLT ENGAGED IN HDG AND ALT HOLD. SUDDENLY, WE GOT A 2 MAIN GEAR UNSAFE LIGHTS AND A PITCHING MOMENT STRONG ENOUGH TO DISENGAGE OUR AUTOPLT AND WE GAINED AT LEAST 200 FT. CTR CALLED AND ASKED US TO CHK OUR ALT AS WE WERE RESPONDING TO THE SIT. WE ASKED TO SLOW BELOW 200 KTS TO CYCLE THE GEAR WHICH WAS APPROVED. WE GOT 3 GREEN LIGHTS DOWN AND STILL 2 RED LIGHTS UP. WE PROCEEDED TO TETERBORO AT A REDUCED SPD AND WHEN WE DSNDED THROUGH ABOUT 4000 FT, BOTH LIGHTS HAD GONE OUT. CAUSE OF THE PROB UNKNOWN. MECHS REPLACED 2 BENT HINGES.

Synopsis :
NEAR PXT, MD, A LEAR 25 CHARTER FLT EXPERIENCES A LNDG GEAR FREE FALL AT CRUISE SPD AT FL250. AFTER ALT RECOVERED, THE ACFT IS SLOWED AND FLOWN TO DEST ARPT.

ACN: 432096

Time
Date : 199903
Day : Sun
Local Time Of Day : 1801 To 2400

Place
State Reference : PA
Altitude.MSL.Single Value : 35000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.ARTCC : ZNY.ARTCC
Make Model : DC-9 10

Component / 1
Aircraft Component : Autopilot
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 18300
Experience.Flight Time.Last 90 Days : 225
Experience.Flight Time.Type : 6600
ASRS Report : 432096

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Radar

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Inflight Encounter : Weather
Resolutory Action.Flight Crew : Took Precautionary Avoidance Action

Supplementary
Problem Areas : Aircraft
Problem Areas : Weather

Narrative :
EWR-MKE. DEPARTED EWR AFTER A LONG TAXI IN A HARD RAIN WITH STRONG DRIVING SURFACE WINDS. ON LATER PART OF CLBOUT THE AUTOPLT WAS UNABLE TO FLY ACFT. ON TAKING OVER MANUALLY, CONCLUDED ELEVATOR CTL FROZEN. WE SUSPECTED ICE DUE TO THE EWR CONDITIONS. FO WENT TO WORK CHKING WX AT VARIOUS ARPTS. PRIME INTERESTS BEING TEMPS AND ANY KNOWN FREEZING LEVELS AND LONG RWYS WITHOUT A XWIND. THE EAST COAST WASN'T AN OPTION DUE TO WX. THE WIND/RWY CONSIDERATION WAS IF WE WERE UNABLE TO FREE THE ELEVATOR EVEN THOUGH IN WARMER AIR (WE ONLY SUSPECTED ICE -- NOT POSITIVE OF CAUSE). FO CONTACTED COMPANY MAINT AND DISPATCH. THEY RECOMMENDED RUNNING APU (HEAT IN AFT COMPARTMENT) AND OPERATING AIRFOIL ANTI-ICE. STARTED A GRADUAL DSCNT FROM FNT TO MKE. (TEMP 2 DEGS, WINDS ALMOST DOWN, 9690 FT RWY 1L.) CTLS FREED UP AT 8000 FT OVER LAKE, WE ANTICIPATED WARMER AIR OVER LAKE. LANDED NORMALLY. ACFT FLEW VERY WELL WITH TRIM IN CRUISE AND DSCNT. HOW IT WOULD FLY CONFIGURING AND LNDG IS SPECULATIVE. FOR 2 MAN CREW -- HIGH WORKLOAD, FO CHKING WX, TALKING TO COMPANY. CAPT FLYING, COORDINATING DSCNT WITH ATC. ALSO GIVING CABIN CREW A HEADS UP IN CASE CTLS WOULDN'T FREE UP. BUILT 'TIME BOX' BASED ON FUEL TO PREPARE CABIN IF IT CAME TO IT. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR STATES THAT THIS TYPE OF INCIDENT HAS HAPPENED AT LEAST TWICE IN THE RECENT PAST. THE MAINT DEPT IS PREPARING A RPT FOR THE NTSB ON THESE INCIDENTS AND LOOKING INTO THE POSSIBILITY OF AUTOPLT MALFUNCTION AND OR ICING OF THE ELEVATORS AND THE ASSOCIATED CABLE AND DRAINAGE SYS FOR THE CTL CABLES. THE RPTR STATES THAT THE AUTOPLT ACTED LIKE THE ACFT WAS BEHIND AND TRYING TO DEAL WITH WAVE ACTION AND THAT HE DISCONNECTED THE AUTOPLT AND WAS ABLE TO FLY THE AIRPLANE MANUALLY AND TRIM WITH THE YOKE TRIM WHICH IS ABOUT 10 TIMES FASTER THAN THE AUTOPLT TRIM. ALSO SOME DRAINAGE HOLES WERE FOUND TO BE PLUGGED AND A POSSIBILITY OF FREEZING AROUND THE CABLE STRUCTURES AFTER WAITING 40 MINS IN DRIVING RAIN THEN CLBING INTO ICING CONDITIONS SHORTLY AFTER TKOF. HE STATES THAT THE TKOF RWY WAS VERY WET BUT DOUBTS THAT FURTHER CONTAMINATION WAS A FACTOR ON TKOF.

Synopsis :
PARTIAL DC9 LOSS OF CTL AFTER TKOF AND CLB IN RAIN AND ICING CONDITIONS FROM EWR.

ACN: 432138

Time
Date : 199903
Day : Fri
Local Time Of Day : 0601 To 1200

Place
State Reference : PR
Altitude.MSL.Single Value : 20000

Environment
Flight Conditions : VMC

Aircraft / 1
Make Model : DC-8 70

Component / 1
Aircraft Component : Autoflight Yaw Damper
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 4914
Experience.Flight Time.Last 90 Days : 103
Experience.Flight Time.Type : 3000
ASRS Report : 432138

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Last 90 Days : 77
ASRS Report : 432413

Person / 3
Function.Flight Crew : Second Officer

Person / 4
Function.Controller : Radar

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Other Spatial Deviation : Track Or Heading Deviation
Independent Detector.ATC Equipment.Other ATC Equipment : Radar
Independent Detector.Other.ControllerA : 4
Resolutory Action.Flight Crew : Overcame Equipment Problem
Resolutory Action.Controller : Issued Advisory
Resolutory Action.Controller : Issued New Clearance

Supplementary
Problem Areas : Aircraft
Problem Areas : Flight Crew Human Performance

Narrative :
CLRNC: JAAWS 9 DEP R507 GTK. AFTER TKOF ON HDG 350 DEGS, WE WERE CLRED DIRECT TO JAAWS. WHILE INTERCEPTING THE 326 DEG RADIAL AT JAAWS, FO COUPLED THE AUTOPLT AND THE ACFT EXPERIENCED CONTINUOUS YAW OSCILLATIONS. FO DISENGAGED THE AUTOPLT WHILE MAINTAINING ACFT CTL, HDG 305 DEGS, WINGS LEVEL, CLBING OUT OF APPROX FL200. CAPT AND FE REVIEWED CHKLIST FOR 'AUTOPLT HARDOVER ANY AXIS.' (THIS WAS THE ONLY AOM PROC WHICH SEEMED TO APPLY.) SHORTLY AFTER, ATC ASKED IF WE WERE PROCEEDING TO UTAHS. AT THIS POINT WE HAD PASSED THROUGH THE 326 DEG RADIAL AND WERE ON THE 318 DEG RADIAL AT 52 NM (APPROX 4 NM L OF COURSE). WE IMMEDIATELY TURNED TO INTERCEPT THE 326 DEG RADIAL. ZSU THEN CLRED US DIRECT TO GTK. WE INFORMED ATC OF OUR PROB AND CONTINUED THE FLT. CONTRIBUTING FACTORS: FATIGUE ASSOCIATED WITH AN EARLY MORNING LCL RPT TIME SLOWED SCAN AND ABILITY TO PRIORITIZE CORRECTLY. ACFT MECHANICAL PROB, PARTICULARLY WITH IT BEING A FLT CTL PROB, DISTR ATTN AWAY FROM NAV RESPONSIBILITIES. SUPPLEMENTAL INFO FROM ACN 432413: FATIGUING NIGHT FLT 7 1/2 HRS INTO A SCHEDULED 12 HR DUTY DAY.

Synopsis :
A NIGHTTIME DC8 FREIGHTER CREW IS DISTR BY A YAW DAMPER PROB AND FLIES PAST THE REQUIRED OUTBOUND RADIAL ON THE JAAWS 9 DEP PROC FROM SJU, PR.

ACN: 432188

Time
Date : 199903
Day : Fri
Local Time Of Day : 1801 To 2400

Place
State Reference : FL
Altitude.MSL.Single Value : 27000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.ARTCC : ZJX.ARTCC
Make Model : B737-200

Component / 1
Aircraft Component : Autopilot
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Observation : Company Check Pilot
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 18000
Experience.Flight Time.Last 90 Days : 100
Experience.Flight Time.Type : 2000
ASRS Report : 432188

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 3
Function.Controller : Radar

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Altitude Deviation : Excursion From Assigned Altitude
Anomaly.Non Adherence : Clearance
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Overcame Equipment Problem
Resolutory Action.Flight Crew : Regained Aircraft Control
Consequence.Other : Maintenance Action

Supplementary
Problem Areas : Aircraft
Problem Areas : Flight Crew Human Performance
Problem Areas : Maintenance Human Performance

Narrative :
AUTOPLT/TRIM MALFUNCTION. ACFT PITCHED UP SEVERAL HUNDRED FT ABOVE INTERMEDIATE CRUISE ALT INBOUND TO TPA. CAPT TRAINEE IN L SEAT DISCONNECTED AUTOPLT AND RETURNED ACFT TO ORIGINAL ALT OF FL270. ALTDEV WAS NOT DETECTED BY ZJX, AS A DSCNT BY PLT'S DISCRETION HAD ALREADY BEEN ISSUED. THE FLT LANDED SAFELY AT TPA WITHOUT FURTHER INCIDENT. MAINT WAS DEBRIEFED FULLY.

Synopsis :
B737 AUTOPLT MALFUNCTION CAUSED ALTDEV OF SEVERAL HUNDRED FT DURING CRUISE.

ACN: 432410

Time
Date : 199903
Day : Fri
Local Time Of Day : 1801 To 2400

Place
State Reference : OH
Altitude.MSL.Bound Lower : 32700
Altitude.MSL.Bound Upper : 33000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.ARTCC : ZID.ARTCC
Make Model : DC-9 30

Component / 1
Aircraft Component : Autopilot
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 17150
Experience.Flight Time.Last 90 Days : 150
Experience.Flight Time.Type : 10000
ASRS Report : 432410

Person / 2
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 4300
Experience.Flight Time.Last 90 Days : 150
Experience.Flight Time.Type : 150
ASRS Report : 432412

Person / 3
Function.Controller : Radar

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Altitude Deviation : Excursion From Assigned Altitude
Anomaly.Non Adherence : Clearance
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Overrode Automation
Resolutory Action.Flight Crew : Regained Aircraft Control
Resolutory Action.Flight Crew : Returned To Assigned Airspace
Consequence.Other : Maintenance Action

Supplementary
Problem Areas : Aircraft
Problem Areas : Flight Crew Human Performance

Narrative :
A SLIGHT TURN WAS BEGUN AND AS TURN DEVELOPED, A SLIGHT CLB BEGAN. WHEN THE ACFT WAS COMMANDED TO WINGS LEVEL, THE CLB RAPIDLY TURNED INTO A DSCNT BTWN 500-700 FPM. ATTEMPTED TO LEVEL ACFT USING VERT SPD CTL WHEEL. DSCNT CONTINUED. AUTOPLT DISENGAGED AND MANUAL LEVELOFF ACCOMPLISHED AT FL327.

Synopsis :
A DC9-30 IN CRUISE AT FL330 DEVIATED FROM THE ASSIGNED ALT DUE TO THE AUTOPLT ALT HOLD FUNCTION FAILURE.

ACN: 432816

Time
Date : 199904
Day : Sat
Local Time Of Day : 0601 To 1200

Place
Locale Reference.Airport : DTW.Airport
State Reference : MI
Altitude.MSL.Single Value : 2500

Environment
Flight Conditions : VMC

Aircraft / 1
Make Model : DC-9 50

Component / 1
Aircraft Component : Engine Driven Pump
Aircraft Reference : X
Problem : Failed

Person / 1
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 4500
Experience.Flight Time.Last 90 Days : 230
Experience.Flight Time.Type : 2000
ASRS Report : 432816

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 3
Function.Controller : Departure

Events
Anomaly.Aircraft Equipment Problem : Critical
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Declared Emergency
Resolutory Action.Flight Crew : Landed In Emergency Condition
Consequence.Other : Maintenance Action

Supplementary
Problem Areas : Aircraft

Narrative :
ON INITIAL DEP FROM DTW RWY 21R, PASSING 2500 FT MSL CAPT (PLT AT CTLS) DIRECTED ME TO BRING FLAPS TO 0 DEG POS. SOON AFTER AT APPROX 200 KIAS, I NOTICED SLIGHT ROLL (TO L) AND YAW (NOSE L). IMMEDIATELY I NOTICED FUEL FLOW L ENG AT 0 PPM (LBS PER HR). CONFIRMED INDICATION WITH N1, N2, AND EGT GAUGES, ALL INDICATED FLAMEOUT OF L ENG. AT THAT POINT, CAPT LEVELED ACFT OFF AT 3000 FT MSL, AND I NOTIFIED ATC (DTW DEP) OF OUR SIT DECLARED EMER. ONCE WE ACCELERATED PAST 223 KIAS (VZF) CAPT DIRECTED ME TO RETRACT SLATS AND READ 'ENG FAILURE/FLAMEOUT CHKLIST.' WHILE CAPT STILL AT CTLS AND HANDLING ATC COMS I READ CHKLIST WHILE ENSUING CAPT CONCURRENCE PRIOR TO MOVEMENT OF ANY COCKPIT SWITCHES. FLT ATTENDANTS AND DISPATCH WERE NOTIFIED AS SOON AS WORKLOAD ALLOWED. SINCE OUR TKOF WAS MADE AT NEAR MAX TKOF WT WE TOLD DISPATCH TO VERIFY LNDG PERFORMANCE/ROLLOUT FOR RWY 21R (LONGEST RWY WITH APPROX 12000 FT USABLE LENGTH). DISPATCH CONCURRED WITH OUR PERFORMANCE DATA. CLB, DSCNT, APCH AND LNDG CHKLISTS WERE COMPLETED AND CAPT MADE AN UNEVENTFUL LNDG AT DTW. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR STATED THE ACFT WAS A DC9-50 WITH JT8D-17 ENGS. THE RPTR SAID THE FLAMEOUT WAS CAUSED BY FAILURE OF THE ENG DRIVEN FUEL PUMP.

Synopsis :
A DC9-50 ON CLB AT 2500 FT DECLARED AN EMER AND DIVERTED DUE TO #1 ENG FLAMEOUT CAUSED BY A FAILED ENG DRIVEN FUEL PUMP.

ACN: 434015

Time
Date : 199904
Day : Fri
Local Time Of Day : 0601 To 1200

Place
State Reference : IA
Altitude.MSL.Single Value : 35000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.ARTCC : ZAU.ARTCC
Make Model : DC-9 30

Component / 1
Aircraft Component : Elevator ControlSystem
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 17000
Experience.Flight Time.Last 90 Days : 240
Experience.Flight Time.Type : 8000
ASRS Report : 434015

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Radar

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Inflight Encounter : Weather
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Overcame Equipment Problem
Consequence.Other : Company Review
Consequence.Other : Maintenance Action

Situations
Aircraft.Make Model.Value : 583.33
Aircraft.Aircraft Component.Value : 27.31

Supplementary
Problem Areas : Aircraft
Problem Areas : Company

Narrative :
ACFT WAS EXPOSED TO MODERATE WIND DRIVEN RAIN FROM THE L REAR WITH +3 DEGS C WHILE ON THE GND FOR ABOUT 1 HR. WHEN ACFT WAS LEVELED OFF AT FL350, ELEVATOR FROZE AND WOULD NOT MOVE. FLEW ACFT WITH PRIMARY AND ALTERNATE TRIM. DSNDED TO WARMER AIR AND ELEVATOR THAWED OUT. NORMAL CTL WAS REGAINED AND LANDED WITHOUT FURTHER PROBS. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE CAPT SAID THAT HE WAS ABLE TO CTL THE ACFT THROUGH USE OF THE TRIM, BUT HE ALSO KNEW THAT AS HE DSNDED HE WOULD FIND WARMER AIR THAT WOULD MELT THE ICE. HE SAID THAT HE KNEW THAT THE PROB WAS CAUSED BY ICING BECAUSE THE FLC WAS UNABLE TO MOVE THE CTL COLUMN AT ALL, WHEREAS THE FLC CAN OVERPWR A JAMMED OR FRAYED CTL CABLE OR A MALFUNCTIONING AUTOPLT. THE RPTR SAID THAT THE FLt CHARACTERISTICS OF THE DC9-30 ARE SUCH THAT EVEN IF THE ELEVATOR DID NOT THAW UNTIL ON THE APCH HE COULD HAVE STILL SUCCESSFULLY FLOWN THE ACFT TO THAT POINT. HE DOES NOT THINK THAT THE DC9-10 OR THE MD80 SERIES COULD DO THIS HOWEVER. WE DISCUSSED THE MGMNT OF THE ANTI-ICE SYS ON ALL OF THESE ACFT. HE SAID THAT HE WAS UNFAMILIAR WITH THE PRACTICE OF SELECTING TAIL ANTI-ICE FIRST ON THE MD80 SYS. HE IS CONDUCTING HIS OWN INVESTIGATION INTO ANTI-ICE PRACTICES AT SEVERAL AIRLINES AND HE WILL SUBMIT THE FINDINGS TO HIS CHIEF PLT.

Synopsis :
AN ACR DC9-30 FLC HAD ICE FORM ON THE CTL SYS FOR THE ELEVATOR AND THEY HAD TO CTL THE ACFT PITCH BY USE OF THE PITCH TRIM SYS.

ACN: 434546

Time
Date : 199904
Day : Tue
Local Time Of Day : 1801 To 2400

Place
State Reference : CA
Altitude.MSL.Single Value : 31000

Environment
Flight Conditions : VMC

Aircraft / 1
Make Model : B737-500

Component / 1
Aircraft Component : Autopilot
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 12000
Experience.Flight Time.Last 90 Days : 60
Experience.Flight Time.Type : 9000
ASRS Report : 434546

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Radar

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Other Anomaly : Loss Of Aircraft Control
Independent Detector.Other.Flight CrewA : 0
Independent Detector.Other.Flight CrewB : 1
Resolutory Action.Flight Crew : Declared Emergency
Resolutory Action.Flight Crew : Landed In Emergency Condition
Resolutory Action.Controller : Issued New Clearance

Supplementary
Problem Areas : Aircraft

Narrative :
WE DEPARTED LAX FOR SFO ON A CLR EVENING. APPROX 50 PAX, 5 CREW MEMBERS ON BOARD. WE WERE FLYING DIRECT TO RZS AT FL310 AT ABOUT .77 MACH IN CLR AND MOSTLY SMOOTH AIR. WIND WAS FROM THE NW, LNAV, VNAV AND SYS B AUTOPLT WERE ENGAGED, BOTH FLT DIRECTORS WERE ON. YAW DAMPER WAS ENGAGED. 2 ACFT WERE AHEAD AT FL310, 10 MI AND 25 MI. WE ASKED FOR FL280. WE BEGAN TO PICK UP VERY LIGHT CHOP AT FL310. ATC CLRED US TO DSND AND I RESET THE ALT WINDOW, THE FO RESET THE CABIN ALT. AS I LEANED FORWARD TO ENTER FL280 IN THE FMC, THE ACFT ABRUPTLY ROLLED HARD TO THE L. NO FLT CTL INPUT HAD BEEN MADE BY EITHER PLT. WE BOTH GRABBED THE YOKE, DISCONNECTED THE AUTOPLT AND STEPPED ON THE R RUDDER WHICH IMMEDIATELY BROUGHT THE PLANE UPRIGHT. I ESTIMATE A MAX OF 20-30 DEGS OF BANK WAS ENCOUNTERED BUT THE ROLL RATE WAS VERY FAST. NO PAX WERE HURT, 1 FLT ATTENDANT WAS THROWN TO THE FLOOR BUT WAS NOT HURT. WE DECLARED AN EMER AND ASKED TO RETURN TO LAX. ATC COMPLIED AND WE STATED THE NATURE OF THE EMER WAS A 'FLT CTL PROB.' WE ELECTED TO DISCONNECT THE YAW DAMPER MANUALLY IN CASE THAT WAS THE CAUSE OF THE PROB. THE FLT CONTINUED UNEVENTFULLY TO LAX. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR STATES THE ACFT INVOLVED IA B737-500. AFTER THE EMER LNDG IN LAX, A FLT SAFETY INVESTIGATION TOOK PLACE. THE FINDINGS OF THE INVESTIGATION INDICATED A MALFUNCTION IN THE AUTOPLT AFFECTING THE ROLL CHANNEL. THERE WAS NO RUDDER OR RUDDER VALVE INVOLVEMENT.

Synopsis :
B737 UNCOMMANDED ROLL AT FL280.

ACN: 435262

Time
Date : 199904
Day : Tue
Local Time Of Day : 1801 To 2400

Place
State Reference : KY
Altitude.MSL.Bound Lower : 21600
Altitude.MSL.Bound Upper : 22000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.ARTCC : ZID.ARTCC
Make Model : MD-88

Component / 1
Aircraft Component : Horizontal Stabilizer Trim
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 8000
Experience.Flight Time.Last 90 Days : 160
Experience.Flight Time.Type : 1920
ASRS Report : 435262

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 3
Function.Controller : Radar

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Altitude Deviation : Overshoot
Anomaly.Non Adherence : Clearance
Anomaly.Non Adherence : FAR
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Returned To Original Clearance
Consequence.Other : Maintenance Action

Supplementary
Problem Areas : Aircraft
Problem Areas : Flight Crew Human Performance

Narrative :
WE WERE GIVEN A XING RESTR OF 20 MI S OF FLM VOR AT FL220. WE STARTED DSCNT AT 30 MI S OF FLM. THE CAPT WAS FLYING WITH THE ACFT ON AUTOPLT. DSNDING THROUGH FL230 FOR FL220 THE ACFT STARTED PITCHING DOWN MORE INSTEAD OF PITCHING UP. I WARNED THE CAPT TO BE PREPARED TO MANUALLY LEVEL OFF. THE CAPT TRIED TO LEVEL OFF SMOOTHLY BUT IN DOING SO THE ACFT MOMENTARILY DSNDED 400 FT LOW TO FL216. DURING THE LATER PHASE OF THE LEVELOFF WE NOTICED THAT THE SECONDARY TRIM WAS STUCK ENGAGED AND SLOWLY RUNNING AWAY IN THE NOSE DOWN POS. THIS GAVE THE CAPT GREAT DIFFICULTY IN THE LEVELOFF UNTIL THE PROB WAS RECOGNIZED AND WE SWITCHED TO PRIMARY (FASTER) TRIM. WE WROTE UP THE PROB FOR MAINT AND CONTINUED UNEVENTFULLY TO DAYTON. ZID DID NOT MENTION OR QUESTION THE MOMENTARY ALTDEV TO US. NO TFC CONFLICTS WERE NOTED VISUALLY OR ON TCASII. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE FO SAID THAT HE HAS ENOUGH EXPERIENCE IN THE MD88 TO KNOW THAT HE SHOULD BE PREPARED TO TAKE ACTION TO INSURE THAT ALTS ARE CAPTURED BY THE AUTOPLT. DURING THIS INCIDENT, THE FO THINKS THAT HE WAS LISTENING TO THE ATIS OR DOING SOMETHING ELSE WHEN HE NOTICED THAT THE DSCNT RATE SEEMED EXCESSIVE FOR THE AMOUNT OF ALT REMAINING BEFORE THEIR ASSIGNED LEVELOFF ALT. HE SUGGESTED THAT THE CAPT MANUALLY LEVEL OFF, BUT INSTEAD HE INITIALLY ATTEMPTED TO USE THE AUTOPLT PITCH CTL WHEEL. AT THIS TIME, THE FLC NOTICED THAT THE AUTOPLT TRIM WAS STILL MOVING IN THE NOSE DOWN DIRECTION. THE CAPT THEN DISCONNECTED THE AUTOPLT AND USED THE MAIN ELECTRIC TRIM AND CTL WHEEL DISPLACEMENT TO CLB BACK TO THEIR ASSIGNED ALT. THE CRUISE TRIM CIRCUIT WAS DISCONNECTED ACCORDING TO THE CHKLIST AND THE PROPER ENTRY WAS MADE IN THE MAINT LOG. THE FO SAID THAT HE WAS UNABLE TO FOLLOW UP ON THE MAINT ACTION BECAUSE THEY CHANGED ACFT AND HE HAS NOT FLOWN THAT ACFT SINCE.

Synopsis :
AN MD88 AIRLINE CREW OVERSHOT THEIR ASSIGNED ALT DURING A DSCNT, IN PART, DUE TO A RUNAWAY CRUISE TRIM NOSE DOWN.

ACN: 437538

Time
Date : 199905
Day : Mon
Local Time Of Day : 1801 To 2400

Place
Locale Reference.Airport : MSP.Airport
State Reference : MN
Altitude.MSL.Single Value : 35000

Environment
Flight Conditions : IMC

Aircraft / 1
Controlling Facilities.ARTCC : ZMP.ARTCC
Make Model : B757-200

Component / 1
Aircraft Component : Turbine Engine
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 5500
Experience.Flight Time.Last 90 Days : 80
Experience.Flight Time.Type : 400
ASRS Report : 437538

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 3
Function.Controller : Radar

Events
Anomaly.Aircraft Equipment Problem : Critical
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Declared Emergency
Resolutory Action.Flight Crew : Diverted To Another Airport
Resolutory Action.Flight Crew : Landed As Precaution
Resolutory Action.Flight Crew : Landed In Emergency Condition
Consequence.Other : Maintenance Action

Supplementary
Problem Areas : Aircraft
Problem Areas : Weather

Narrative :
PROB AROSE AT CRUISE, FL350, LIGHT ICING/LIGHT TURB ASSOCIATED WITH CUMULO NIMBUS. L ENG INDICATED N1 VIBRATIONS IN 'AMBER' RANGE, APPROX 3.8. INITIAL INDICATION WAS VIA EICAS. CAPT REDUCED L THROTTLE TO IDLE, N1 VIBES REDUCED TO NORMAL RANGE. INCREASED PWR TO CRUISE N1, VIBRATIONS INCREASED TO 5.0 (STILL IN 'AMBER' RANGE). ADVANCED THROTTLES TO CLB PWR (IN ATTEMPT TO CLB ABOVE ICE/TURB), N1 VIBRATION STAYED AT 5.0 AND L ENG EXPERIENCED 2 SIGNIFICANT (ROLLED/YAWED ACFT) COMPRESSOR STALLS. ALSO PLTS DETECTED AN ODOR SIMILAR TO BURNING ELECTRICAL INSULATION. CAPT ELECTED TO PERFORM PRECAUTIONARY ENG SHUTDOWN USING ENG FAILURE/SHUTDOWN CHKLIST AND DIVERT TO MSP (NEAREST SUITABLE FIELD). LNDG/RECOVERY ROUTING, UNEVENTFUL. HUMAN FACTORS: CREW ATTRIBUTED VIBRATIONS TO ICING CONDITIONS UNTIL 'ELECTRICAL SMOKE' ODOR AND COMPRESSOR STALLS CONVINCED PLTS TO SHUT DOWN ENG. MAY HAVE BEEN A TENDENCY TO DENY ANY MECHANICAL PROB EXISTED. CREW ALSO RATIONALIZED THAT 'ELECTRICAL SMOKE' ODOR WAS ASSOCIATED WITH OZONE AND ST ELMO'S FIRE ACTIVITY. FIXATION ON METEOROLOGICAL CONDITIONS PROBABLY WORKED AGAINST ULTIMATE DECISION TO SHUT DOWN ENG. EMER PROCS, RECENTLY PRACTICED IN SINGLE VISIT TRAINING SIMULATOR SESSION, RAN FLAWLESSLY. FLT ATTENDANTS PERFORMED PROFESSIONALLY.

Synopsis :
B757 CREW HAD AN ENG FAILURE.

ACN: 438348

Time
Date : 199905
Day : Fri
Local Time Of Day : 0001 To 0600

Place
Locale Reference.Airport : EWR.Airport
State Reference : NJ
Altitude.MSL.Bound Lower : 2500
Altitude.MSL.Bound Upper : 6000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.TRACON : N90.TRACON
Make Model : B737-300

Component / 1
Aircraft Component : Generator Drive
Aircraft Reference : X
Problem : Improperly Operated

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 15000
Experience.Flight Time.Last 90 Days : 90
Experience.Flight Time.Type : 3000
ASRS Report : 438348

Person / 2
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 10000
Experience.Flight Time.Last 90 Days : 100
Experience.Flight Time.Type : 5000
ASRS Report : 438347

Person / 3
Function.Controller : Departure

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Other Spatial Deviation : Track Or Heading Deviation
Anomaly.Non Adherence : Clearance
Anomaly.Non Adherence : Company Policies
Anomaly.Non Adherence : FAR
Anomaly.Non Adherence : Published Procedure
Anomaly.Other Anomaly : Speed Deviation
Independent Detector.ATC Equipment.Other ATC Equipment : RADAR
Independent Detector.Other.ControllerA : 3
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Overcame Equipment Problem
Resolutory Action.Flight Crew : Returned To Original Clearance
Resolutory Action.Controller : Issued Advisory
Consequence.FAA : Reviewed Incident With Flight Crew

Supplementary
Problem Areas : Company

Problem Areas : Environmental Factor
Problem Areas : Flight Crew Human Performance

Narrative :
ON MAY/XA/99, WHILE OPERATING FLT EWR-CLT, WE EXPERIENCED A LOSS OF BOTH GENERATORS. DUE TO THE IMMEDIATE FAILURE OF THE AUTOPLT AND PRIMARY FLT INSTRUMENTATION, WHICH FROZE IN THE POS THEY WERE IN AT THE TIME OF THE ELECTRICAL LOSS, WE WERE REQUIRED TO TAKE CTL OF THE ACFT MANUALLY AND OPERATE USING THE STANDBY INSTS. THE ACTIVITY LEVEL ON THE FLT DECK INTENSIFIED AS WE ATTEMPTED TO DETERMINE WHAT THE FAILURE WAS (A DUAL IRS FAILURE AND A DUAL ENG FAILURE BOTH APPEAR THE SAME ON THE FORWARD INST PANEL) WHILE ENSURING THE SAFETY OF OUR PAX. WE HAD DEPARTED RWY 4R EWR AND TURNED TO A 060 DEG HDG, CLBING TO 2500 FT, AND WERE PROCEEDING VIA THE EWR SID. WE WERE THEN INSTRUCTED BY DEP CTL TO TURN L TO A 280 DEG HDG AND TO CLB AND MAINTAIN 10000 FT. AT THE TIME OF THE FAILURE WE WERE IN A 30 DEG L CLBING TURN OUT OF 2500 FT FOR 10000 FT. THE FO WAS THE PF AND HAD THE 'B' AUTOPLT ENGAGED. WHEN THE AUTOPLT DISENGAGED, THE FO MANUALLY TOOK CTL OF THE ACFT, ROLLED WINGS LEVEL AND PROCEEDED STRAIGHT AHEAD, WHILE THE CO EVALUATED AND REACTED TO THE SIT AT HAND. WE WERE UNABLE TO ADHERE TO THE ISSUED CLRNC TO TURN TO THE 280 DEG HDG WHILE WE EVALUATED THE SIT AND RAN OUR QRH CHKLIST, ALTHOUGH WE DID CONTINUE TO CLB. OUR SPD INCREASED TO 280 KTS. DURING THE LATER STAGES OF THE EVENT, ATC QUESTIONED US AS TO OUR HDG. WE ADVISED HIM THAT WE WERE STILL TURNING TO 280 DEGS AND THAT WE HAD HAD A PROB. WE HAD NOT DECLARED AN EMER, NOR DID WE FEEL THE NEED TO DO SO AS THE PROB HAD BEEN RECTIFIED BY THAT TIME. ATC THEN ASKED US TO STATE THE NATURE OF OUR PROB, AT WHICH TIME THE CO ADVISED THE CTLR OF THE LOSS OF BOTH GENERATORS. THE QRH PROCS WERE EFFECTIVE IN RESTORING PWR TO THE ACFT AND WE CONTINUED ON TO OUR DEST UNEVENTFULLY. A LOGBOOK ENTRY WAS MADE AND MAINT RESPONDED. HUMAN PERFORMANCE CONSIDERATIONS: THIS EVENT OCCURRED AT APPROX AM58. WE WERE IN THE MIDDLE OF A CONTINUOUS ON DUTY (ON DUTY ALL NIGHT, ODAN) TRIP. WE HAD LANDED AT EWR AROUND XA00 AND ARRIVED AT THE HOTEL AROUND XA30. WE WERE ONLY ABLE TO GET ABOUT 3 1/2 HRS OF SLEEP PRIOR TO THE INCIDENT. MINIMUM REST PRIOR TO THE FLT DICTATED THAT WE MAINTAIN BASIC FLYING DISCIPLINES. THIS IS WHY WE IMMEDIATELY FOCUSED ON FLYING THE ACFT WINGS LEVEL, AND ENSURING THAT THE ACFT WAS IN NO DANGER OF BECOMING UNCTLABLE.

Synopsis :
A B737-300 LOSES BOTH GENERATORS DURING A CLBING TURN N OF EWR AT ABOUT 3000 FT.

ACN: 438810

Time
Date : 199905
Day : Sat
Local Time Of Day : 0601 To 1200

Place
Locale Reference.Airport : IAH.Airport
State Reference : TX
Altitude.MSL.Single Value : 3000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.TRACON : I90.TRACON
Make Model : B737-500

Component / 1
Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Improperly Operated

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 18000
Experience.Flight Time.Last 90 Days : 175
Experience.Flight Time.Type : 9000
ASRS Report : 438810

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Departure

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Non Adherence : FAR
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.None Taken : Anomaly Accepted

Supplementary
Problem Areas : Aircraft
Problem Areas : Flight Crew Human Performance

Narrative :
THE TWR CLRED US TO TURN R TO 360 DEG HDG AFTER TKOF FROM RWY 15. AT 400 FT, FO ENGAGED HDG SELECT AND I ROLLED ACFT INTO A 30 DEG BANK TO R. THE FIRST THING I NOTICED WAS THE FLT DIRECTOR ROLL BAR WAS NOT COMMANDING THE PROPER TURN AND FO STATED HDG BUG WAS MORE THAN 180 DEGS AROUND SO THE OPPOSITE TURN WAS BEING COMMANDED. AT 1000 FT, I CALLED FOR FLAPS 1 DEG AND VNAV AND FO SELECTED F1 AND VNAV. THE AIRSPD BUG CHANGED TO 220 KTS AS THE FLAPS RETRACTED TO 1 DEG. AT THE SAME TIME DEP CTL CLRED US TO CLB WITH NO SPD LIMIT. SINCE WE WERE ALMOST TO 3100 FT AGL AND NEARLY ON OUR HDG, I ASKED THE FO TO DELETE OUR SPD. I NOTICED FO TRIED TO DELETE OUR CLB SPD AND FMC ANNUNCIATED INVALID DELETE. I ADVISED THE FO THAT HE COULD DELETE THE SPD RESTR BUT WOULD ALSO HAVE TO SELECT ECONOMY CLB BEFORE THE AIRSPD BUG WOULD COMMAND AN ACCELERATION. ABOUT THIS TIME WE BEGAN TO LEVEL OFF AT 5000 FT AND TO KEEP THE THROTTLES FROM REDUCING PWR, I SELECTED LEVEL CHANGE AND DIALED SPD TO 300 KTS. I BEGAN TO FEEL THE RUMBLE AT ABOUT 230 KTS BUT IT WASN'T UNTIL 240 KTS THAT I REALIZED THE FLAPS WERE STILL AT 1 DEG. I IMMEDIATELY CALLED FOR FLAPS UP AND REDUCED THROTTLES TO IDLE AS THE AIRSPD APCHED 250 KTS. BY THE TIME THE FLAPS WERE UP, THE FMC CLB WAS SET UP PROPERLY SO FO RESELECTED VNAV AND ACFT ACCELERATED TO 300 KTS. THE TKOF IS ALWAYS A BUSY TIME AND THEN I ADDED ADDITIONAL WORKLOAD TO MYSELF AND THE FO BY DOING A NONSTANDARD CLB (LEAVING FLAPS AT 1 DEG DURING A LOW SPD 180 DEG TURN TO KEEP THE TURN RADIUS SMALL). I THEN BECAME DISTR BY THE NO SPD RESTR CLRNC. EVEN THEN WE WOULD HAVE STAYED WITHIN LIMITS IF I HAD NOT CHANGED THE CLB MODE WITHOUT THE FO'S KNOWLEDGE SO HE WAS NOT ABLE TO MONITOR AND CHALLENGE MY ACTIONS.

Synopsis :
B737-500 FLC EXCEEDS MAX FLAP SPD CLB OUT OF IAH.

ACN: 439659

Time
Date : 199906
Day : Wed
Local Time Of Day : 0601 To 1200

Place
Locale Reference.Airport : LGA.Airport
State Reference : NY
Altitude.MSL.Single Value : 3000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.TRACON : N90.TRACON
Make Model : B737-400

Component / 1
Aircraft Component : Rudder Control System
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 25000
Experience.Flight Time.Last 90 Days : 200
Experience.Flight Time.Type : 2000
ASRS Report : 459659

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Approach

Events
Anomaly.Aircraft Equipment Problem : Critical
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Overrode Automation
Resolutory Action.Flight Crew : Regained Aircraft Control
Consequence.Other : Maintenance Action

Situations
Aircraft.Make Model.Value : 148.44
Aircraft.Aircraft Component.Value : 27.21

Supplementary
Problem Areas : Aircraft

Narrative :
UNCOMMANDED YAW TO THE R WITH RUDDER DISPLACED ABOUT 2-3 INCHES. ACFT REACHED 10 DEG BANK AND YAWED 10 DEGS TO THE R BEFORE AUTOPLT, AUTOTHROTTLE AND YAW DAMPER WERE TURNED OFF. ACFT WAS BROUGHT BACK TO LEVEL FLT HAND FLYING. NO FURTHER ACTION WAS REQUIRED. LNDG NORMAL. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR DID NOT FOLLOW UP THE MAINT ACTION FOR THE UNCOMMANDED RUDDER DEFLECTION. HE STATED THE DEFLECTION WAS RAPID AND VIOLENT BUT CTRED WHEN PWR WAS REMOVED FROM THE AUTOPLT AND YAW DAMPER SYS. THE ACFT WAS REMOVED FROM SVC FOR MAINT. THE RPTR DID NOT FOLLOW THE ACFT THROUGH MAINT NOR DID HE RECALL ANY OTHER DETAILS.

Synopsis :
A B737-400 HAD A RAPID AND VIOLENT R RUDDER DEFLECTION OF ABOUT 2-3 INCHES ON APCH TO LGA. THE RUDDER CTRED AFTER THE AUTOPLT AND YAW DAMPER WERE TURNED OFF.

ACN: 440434

Time
Date : 199906
Day : Sun
Local Time Of Day : 1801 To 2400

Place
Locale Reference.Airport : IAH.Airport
State Reference : TX

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.TRACON : I90.TRACON
Make Model : B737-300

Component / 1
Aircraft Component : Aeroplane Flight Control
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 20000
Experience.Flight Time.Last 90 Days : 120
Experience.Flight Time.Type : 120
ASRS Report : 440434

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Approach

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Other Anomaly : Loss Of Aircraft Control
Independent Detector.Other.Flight CrewA : 1
Resolutory Action.Flight Crew : Landed As Precaution
Resolutory Action.Flight Crew : Regained Aircraft Control
Consequence.Other : Maintenance Action

Situations
Aircraft.Make Model.Value : 148.43
Aircraft.Aircraft Component.Value : 27

Supplementary
Problem Areas : Aircraft

Narrative :
UNCOMMANDED ROLL/YAW. ON JUN/XA/99, I PICKED UP ACFT (A B737-300) AT PORTLAND, ME, FOR THE FIRST LEG OF A 2 LEG DAY TO HOUSTON. THE CAPT THAT BROUGHT THE AIRPLANE IN HAD NO COMPLAINTS NOR WERE THERE ANY LOG WRITE-UPS. WE HAD 1 1/2 HRS GND HOLD AT PWM AT THE GATE DUE TO TFC AND WX AT PHL. FO FLEW THE LEG FROM PWM TO PHL. EVERYTHING WENT NORMAL AND ALL APPEARED TO BE OK WITH THE ACFT. I DID NOTICE AND MENTIONED THAT MY LOC DID NOT PICK UP A SIGNAL UNTIL 3 OR 4 MINS AFTER HIS DID. ON THE GND AT PHL, INSTEAD OF CHANGING ACFT, WE WERE TOLD TO KEEP THIS ACFT FOR THE LEG TO HOUSTON. I FLEW THE LEG FROM PHL TO IAH WITH THE ACFT FLYING NORMAL DURING TKOF, CLBOUT AND LEVELOFF. IT WAS A NORMAL LEG FLOWN AT THE FLT PLANNED ALT OF FL310. DSCNT WAS NORMAL WITH NO ERRATIC PERFORMANCE. TFC WAS LIGHT AND WE WERE CLRED FOR THE ILS TO RWY 26 AT IAH. THERE WERE NO ACFT IN FRONT OF US WHILE WE WERE ON THE APCH AND THE WINDS WERE LIGHT TO CALM. THIS BEING MY FIRST TIME INTO IAH. I PURPOSELY SLOWED DOWN AND STARTED CONFIGURING THE ACFT A LITTLE EARLY. I CALLED FOR GEAR DOWN AND FLAPS 15 DEGS AT THE 11 DME POINT FROM THE RWY. I WAS ON THE GS HAND FLYING THE ACFT WITH THE AUTOTHROTTLES ENGAGED. BUGGING DOWN TO 150 KTS WITH FLAPS 15 DEGS, I CALLED FOR FLAPS 25 DEGS AND 30 DEGS AND BUGGED DOWN TO BUG SPD +5 KTS. THE AUTOTHROTTLES RETARDED THE THROTTLES TO IDLE (AT 8 DME FROM FIELD). WHEN THE SPD APCHED BUG THE THROTTLES ADVANCED TO MAINTAIN THE DIALED IN SPD WHICH WAS AT 134 KTS. AT THIS POINT THE ACFT ROLLED R THEN L AT 10 DEGS, 2-3 TIMES AND THERE SEEMED TO BE SOME YAW FIRST R THEN L. I DISENGAGED THE AUTOTHROTTLES AND SAID TO THE FO, 'I GUESS THAT WAS ASYMMETRICAL THRUST (SPOOL UP).' WHAT WAS SO NOTICEABLE ABOUT THE EVENT WAS THAT WHEN I TRIED TO COUNTERACT THE CONDITIONS THE CTLS WERE VERY SOFT TO ALMOST NON EXISTENT. I CONTINUED ON THE APCH WITH THE RWY IN SIGHT AND AFTER SAY 10-20 SECONDS WITH SPD AND DSCNT STABILIZED, THE ACFT STARTED THE UNCOMMANDED ROLLING MOTION AGAIN, AGAIN THE FLT CTLS DID NOT INITIALLY STOP NOR CORRECT THE ACTION. AGAIN THE CTLS DID NOT APPEAR TO BE RESPONDING TO INPUTS NORMALLY. IT TOOK EXAGGERATED L AILERON TO STOP THE ROLLS TO THE R AND VICE VERSA, WITH THE RUDDER FEELING SOFT AND MUSHY AND NOT RESPONDING TO INPUTS. ONCE AGAIN I REGAINED CTL. (AT THE ONSET OF THE SECOND SERIES OF ROLLS I CALLED FOR YAW DAMPER OFF AND AT THE SAME TIME REACHED UP AND TURNED IT OFF.) AT THIS POINT I ASKED WHAT WERE THE WINDS FROM PAGE 2 OF THE PROGRESS HDG IN THE FMC. HE SAID 'CALM.' ALL APPROPRIATE CHKLISTS HAD BEEN CALLED FOR AND COMPLETED I MIGHT ADD. FOR A SHORT TIME -- SAY 5-10 SECONDS -- CTL INPUTS APPEARED TO RETURN TO NORMAL, AND THEN FROM SAY 500-800 FT OUT THEY APPEARED TO BE GRADUALLY JUST FADING OUT WITH THE ACFT CONTINUING THE ROLL ACTION WITH VERY LITTLE RUDDER RESPONSE. IN ANY NORMAL ACFT I WOULD HAVE GONE AROUND AT THIS POINT, BUT AT THIS POINT I DID NOT FEEL THE AIRPLANE WAS AIRWORTHY. I DECIDED I HAD TO LAND EVEN IF IT MEANT A HARD LNDG DUE TO LACK OF NORMAL CTL INPUTS. I HAD MARGINAL RUDDER AND AILERON CTL AT TOUCHDOWN. I USED NOSE-UP TRIM AT FLARE AND IT GAVE ME A NORMAL LNDG. FROM THE 500 FT POINT ON DOWN, I CONFIRMED SYMMETRICAL THRUST, NORMAL SINK AND REALIZED THAT I WOULD HAVE TO ACCEPT DRIFT AT TOUCHDOWN RATHER THAN HAVE AN EXAGGERATED AILERON INPUT IN AND HAVE THE CTLS RETURN TO NORMAL AND HIT AN ENG OR WINGTIP. ROLLOUT AND REVERSE APPEARED TO BE NORMAL. TAXI IN WAS NORMAL. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE CREW WAS ON THE SECOND LEG OF THE DAY WITH THE ACFT. ON APCH, WITH FLAPS 15 DEGS AND APPROX 150 KTS, THE ACFT BEGAN AN UNCOMMANDED YAW AND ROLL. AT THIS TIME THE ROLLING MOTION WAS ABOUT 10 DEGS FROM SIDE-TO-SIDE AND BECOMING DIVERGENT. THE CREW DISCONNECTED THE AUTOPLT AND AUTOTHROTTLES, NO CHANGE. THE CAPT THEN VERIFIED THAT THE ENGS WERE NOT SURGING BY OBSERVING NO CHANGE IN N1 OR FUEL FLOW. NEXT, THE YAW DAMPER WAS TURNED OFF, AGAIN NO CHANGE. HYD SYS 'A' AND 'B' WERE VERIFIED AS NORMAL. ALL THIS TIME THE CAPT WAS ATTEMPTING TO CTL THE ROLL WITH CTL YOKE INPUT. USING THE TECHNIQUE HE WAS TAUGHT TO CTL DUTCH ROLLS, HE INPUTTED SHARP AILERON AND SPOILER INPUTS. CTL YOLK ANGLES OF AT LEAST 45 DEGS WERE USED. AT NO TIME DID THE CAPT FEEL ANY UNWANTED MOVEMENT IN THE RUDDER PEDDLES. THE CREW DID NOT ATTEMPT TO TURN ON STANDBY RUDDER BECAUSE OF THE LOW ACFT ALT. THE FO BECAME CONCERNED THAT IF ALLOWED TO CONTINUE FOR SEVERAL MORE CYCLES, THE ACFT WOULD GO ON ITS BACK. THE CAPT FELT THE LATERAL AND RUDDER CTL WERE SOFT AND DID NOT PROVIDE NORMAL RESPONSE. THE CAPT DEBRIEFED THE ACR MAINT DEPT, AND HAD AN EXTENSIVE DISCUSSION WITH ACR FLT TEST DEPT. THE ACFT WAS GIVEN AN EXTENSIVE FLT TEST AND FERRIED BACK TO THE ACR MAIN MAINT BASE. THE ONLY THING THAT WAS FOUND WAS A LOOSE FLAP FAIRING CANOE ON THE L WING. THE CAPT DOES NOT FEEL THAT THIS COULD HAVE CAUSED THE PROBS HE EXPERIENCED.

Synopsis :
B737 CREW HAD UNCOMMANDED CTL INPUT AND UNRESPONSIVE FLT CTLS ON FINAL APCH AT IAH.

ACN: 440554

Time
Date : 199906
Day : Sun
Local Time Of Day : 0001 To 0600

Place
State Reference : NM
Altitude.MSL.Bound Lower : 30600
Altitude.MSL.Bound Upper : 31000

Aircraft / 1
Controlling Facilities.ARTCC : ZAB.ARTCC
Make Model : DC-10 Undifferentiated or Other Model

Component / 1
Aircraft Component : Autopilot
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Flight Crew : First Officer
ASRS Report : 440553

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain
ASRS Report : 440554

Person / 3
Function.Flight Crew : Second Officer
ASRS Report : 440702

Person / 4
Function.Controller : Radar

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Altitude Deviation : Excursion From Assigned Altitude
Anomaly.Non Adherence : Clearance
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Overcame Equipment Problem
Resolutory Action.Flight Crew : Returned To Assigned Altitude
Consequence.Other : Maintenance Action

Supplementary
Problem Areas : Aircraft
Problem Areas : Flight Crew Human Performance
Problem Areas : Weather

Narrative :
CRUISING AT FL310 IN THE VICINITY OF CIM VORTAC, AUTOPLT #1 ENGAGED. EXPERIENCED UNCOMMANDED PITCH OSCILLATIONS -- PRIMARILY IN THE DOWN DIRECTION. APPEARED, AT FIRST, TO BE MOUNTAIN WAVE ACTIVITY. ACHIEVED 1000 FPM DOWN ON VSI'S BEFORE CAPT (PF) COULD DISCONNECT AUTOPLT AND RETURN ACFT TO LEVEL FLT. LOST APPROX 400 FT. INFORMED ZAB OF ALT LOSS DUE TO MOUNTAIN WAVE AND RETURNED ACFT TO FL310. NO TERRAIN OR ACFT CONFLICTS APPARENT. FURTHER ANALYSIS REVEALED OSCILLATING PITCH BAR IN CAPT'S VDI. WE CONCLUDED THE LOSS WAS NOT MOUNTAIN WAVE, BUT A FLT DIRECTOR/AUTOPLT PITCH MALFUNCTION. USED AUTOPLT #2 FOR REMAINDER OF FLT WITHOUT FURTHER PROBS.

Synopsis :
DC10 FLC EXPERIENCES UNCOMMANDED PITCH OSCILLATIONS.

ACN: 440707

Time
Date : 199906
Day : Mon
Local Time Of Day : 1801 To 2400

Place
Locale Reference.Airport : MWA.Airport
State Reference : WA
Altitude.MSL.Bound Lower : 34400
Altitude.MSL.Bound Upper : 37000

Environment
Flight Conditions : Mixed

Aircraft / 1
Controlling Facilities.ARTCC : ZSE.ARTCC
Controlling Facilities.TRACON : S46.TRACON
Make Model : A320

Component / 1
Aircraft Component : Emergency Exit
Aircraft Reference : X
Problem : Malfunctioning

Component / 2
Aircraft Component : Door Warning System
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 18000
Experience.Flight Time.Last 90 Days : 250
Experience.Flight Time.Type : 450
ASRS Report : 440707

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Approach

Events
Anomaly.Aircraft Equipment Problem : Critical
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Declared Emergency
Resolutory Action.Flight Crew : Landed In Emergency Condition
Resolutory Action.Aircraft : Equipment Problem Dissipated

Supplementary
Problem Areas : Aircraft

Narrative :
CLBING THROUGH FL344 FOR FL370 IN SMOOTH AIR, THE ACFT EXPERIENCED A LOUD MOMENTARY THUMP JOLT FOLLOWED BY A MOMENTARY VIBRATION. IT WAS A HARD SUDDEN THUMP JOLT THAT DISPLACED THE ACFT AND HAD AN AUDIBLE THUMP NOISE. SIMULTANEOUSLY WITH THIS HARD JOLT, THE L AFT OVERWING EMER EXIT OPEN ECAM WARNING ILLUMINATED AND REMAINED ON. WE IMMEDIATELY LEVELED OFF AND NOTED THE CABIN PRESSURE WAS NORMAL AND REMAINING NORMAL. THE HARD JOLT WAS SIGNIFICANT ENOUGH TO ASK THE 'A' FLT ATTENDANT TO COME TO THE FLT DECK AND CONFIRM THERE WERE NO INJURIES AND VERIFY THE CABIN WAS SECURE. THE 'A' FLT ATTENDANT VERIFIED NO INJURIES AND ADVISED THE WHITE SLIDE INFLATION LIGHT ADJACENT TO THE L OVERWING EMER EXITS WAS ILLUMINATED. AS A PRECAUTION, WE DSNDED TO THE MEA, DECLARED AN EMER AND RETURNED TO SEA. APPROX 1/2 WAY BACK TO SEA, THE ECAM WARNING EXTINGUISHED. FLT ATTENDANTS ADVISED THAT IS APPROX THE SAME TIME THE WHITE SLIDE INFLATION LIGHT EXTINGUISHED AS WELL. OVERWT LNDG ACCOMPLISHED AT SEA. LNDG WT WAS 143400 LBS. LNDG WAS NORMAL. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR STATES THAT THE CLB UP TO THE TIME OF THE INCIDENT WAS SMOOTH AND THAT THE JOLT EXPERIENCED WAS MUCH LIKE XING WAKE TURB WITH PERPENDICULAR MOTION. HE STATES THAT THE CREW WONDERED WHETHER THEY HAD IMPACTED SOMETHING OR SOME PART HAD SEPARATED FROM THE ACFT AND DISCUSSED THE POSSIBILITY OF LOSS OF PRESSURIZATION AND DONNING OF OXYGEN MASKS. THE FAA CTLR MADE NO MENTION OF OTHER TFC IN THE VICINITY OF THE INVOLVED ACFT. ON CHKING WITH MAINT AT A LATER DATE, THE RPTR LEARNED THAT NOTHING WAS FOUND TO BE OUT OF THE ORDINARY ON GND INSPECTION. THE ACFT WAS FLOWN THE NEXT DAY, AND THAT FLC EXPERIENCED THE SAME MALFUNCTION OF ECAM WARNING LIGHTS DURING AN ENCOUNTER WITH MODERATE CHOP. AS A RESULT, A SENSOR OR SWITCH AT THE L AFT EMER OVERWING EXIT WAS REPLACED AND THE RPTR KNOWS OF NO FURTHER ACTION OR DIFFICULTIES WITH THE ACFT. HE STATES ALSO THAT HE IS UNAWARE OF THIS TYPE OF OCCURRENCE WITH THIS ACFT OR ANY OTHER OF THE A320 FLEET.

Synopsis :
A320 CREW EXPERIENCES JOLT VIBRATION ACCOMPANIED BY ECAM MESSAGE WARNING FOR L OVERWING EXIT. FLC ELECTS TO RETURN TO SEA.

ACN: 441166

Time
Date : 199906
Day : Fri
Local Time Of Day : 1201 To 1800

Place
Locale Reference.Airport : SAN.Airport
State Reference : CA
Altitude.AGL.Single Value : 0

Aircraft / 1
Controlling Facilities.Tower : SAN.Tower
Make Model : MD-80 Super 80

Component / 1
Aircraft Component : Turbine Engine
Aircraft Reference : X
Problem : Failed

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
ASRS Report : 441166

Person / 2
Function.Flight Crew : First Officer
ASRS Report : 44162

Person / 3
Function.Controller : Local

Events
Anomaly.Aircraft Equipment Problem : Critical
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Declared Emergency
Resolutory Action.Flight Crew : Diverted To Another Airport
Resolutory Action.Flight Crew : Landed In Emergency Condition
Resolutory Action.Controller : Provided Flight Assist
Consequence.Other : Flight Cancelled
Consequence.Other : Maintenance Action

Supplementary
Problem Areas : Aircraft

Narrative :
ON ROTATION, R ENG FAILED. SPD WAS ABOUT 145 KTS. FLEW PROFILE FOR CLEAN-UP AND LANDED AT MIRAMAR, NKX. DECLARED AN EMER WITH SAN TWR. CFR EQUIP AT MIRAMAR. ACFT WAS STOPPED ON RWY TO DETERMINE CONDITION OF ENG AND ACFT. DID NOT DO A GND EVAC. DEPARTED VIA STARS TO BUSSES AND RETURNED TO SAN. SUPPLEMENTAL INFO FROM ACN 441162: FLT DEPARTING SAN FOR DFW. I WAS THE FO FLYING. ON TKOF ROLL AT VR, AS NOSE WAS LIFTING OFF, A BANG SOUND WAS NOTED AND A SLIGHT VEER TO THE R. VECTORS FOR NKX WERE RECEIVED.

Synopsis :
AN S80 LOSES AN ENG ON TKOF FROM SAN AND DIVERTS TO NKX, CA.

ACN: 442873

Time
Date : 199907
Day : Tue
Local Time Of Day : 1801 To 2400

Place
State Reference : CA
Altitude.MSL.Single Value : 6000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.TRACON : SCT.TRACON
Make Model : B737-300

Component / 1
Aircraft Component : Autoflight Yaw Damper
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 9000
Experience.Flight Time.Last 90 Days : 230
Experience.Flight Time.Type : 5000
ASRS Report : 442873

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Departure

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Other Anomaly : Loss Of Aircraft Control
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Landed As Precaution
Resolutory Action.Flight Crew : Overcame Equipment Problem
Resolutory Action.Flight Crew : Regained Aircraft Control
Consequence.Other : Maintenance Action

Supplementary
Problem Areas : Aircraft

Narrative :
UNCOMMANDED YAW ON CLBOUT PASSING 6000 FT AT 250 KTS. YAW CAN BE DESCRIBED AS RAPID SIDE-TO-SIDE MOTION. THIS EVENT OCCURRED 2 TIMES, LASTING 2-3 SECONDS EACH TIME. THE YAW DAMPER WAS SHUT OFF AND A RETURN TO LAX WAS MADE WITHOUT INCIDENT. MAINT WAS ADVISED, AND THE ACFT WAS GNDED FOR INSPECTION. ATC WAS IMMEDIATELY NOTIFIED AND NO CLRNC DEVS OCCURRED. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR CONFIRMED THAT THE ACFT WAS, IN FACT, A B737-300. HE STATED THAT AFTER TURNING OFF THE YAW DAMPERS, THE OSCILLATION DID NOT RECUR. HE WAS UNABLE TO TROUBLESHOOT THE SYS DUE TO HIS DESIRE TO RETURN AND LAND ASAP. MAINT TOOK THE ACFT OTS AND REMOVED THE FDR. THEY ALSO CHKED AND DETERMINED THAT SOME BUT NOT ALL OF THE MODIFICATIONS HAD BEEN COMPLETED. NO ANOMALY WAS DISCOVERED AND THE ACFT WAS EVENTUALLY RETURNED TO SVC. THE RPTR ALSO MENTIONED THAT AT THE TIME OF THE OCCURRENCE, THE POSSIBILITY OF SOME WX RELATED CTL PROB NEVER ENTERED HIS MIND.

Synopsis :
FLC ENCOUNTERS UNCOMMANDED YAW OSCILLATION WHILE CLBING OUT OF LAX.

ACN: 443294

Time
Date : 199907
Day : Fri
Local Time Of Day : 1201 To 1800

Place
Locale Reference.Airport : ZBAA.Airport
State Reference : FO
Altitude.MSL.Single Value : 12000

Environment
Flight Conditions : VMC

Aircraft / 1
Make Model : MD-11

Component / 1
Aircraft Component : Wing Trailing Edge
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 5500
Experience.Flight Time.Last 90 Days : 150
Experience.Flight Time.Type : 1300
ASRS Report : 443294

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 13500
Experience.Flight Time.Last 90 Days : 150
Experience.Flight Time.Type : 3000
ASRS Report : 443293

Person / 3
Function.Controller : Departure

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Conflict : Airborne Less Severe
Anomaly.Non Adherence : Required Legal Separation
Anomaly.Other Anomaly : Loss Of Aircraft Control
Anomaly.Other Anomaly : Speed Deviation
Independent Detector.ATC Equipment.Other ATC Equipment : Radar
Independent Detector.Other.ControllerA : 3
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Overcame Equipment Problem
Resolutory Action.Flight Crew : Regained Aircraft Control
Resolutory Action.Controller : Issued Advisory

Supplementary
Problem Areas : Aircraft
Problem Areas : Airspace Structure
Problem Areas : Flight Crew Human Performance

Narrative :
AFTER TKOF FROM BEIJING THE FLAPS RETRACTED FROM 25 DEGS TO 22 DEGS AND STOPPED. I WAS THE PF SO I CONTINUED THE DEP AND HANDLED THE RADIO WHILE THE PNF RAN THE 'FLAP DISAGREE' CHKLIST. HE COULDN'T GET THE FLAPS UP SO WE MADE A DECISION TO RETURN TO BEIJING. DURING THE DSCNT HE ATTEMPTED TO RETRACT THE FLAPS NEAR APCH SPD. THE FLAPS RETRACTED AND THE AUTOPLT DISCONNECTED AND THE ACFT PITCHED UP AS THE SPD INCREASED TO AVOID A STALL. BEIJING CTL RPTED TFC WHICH WE SAW AND IT APPEARED TO NOT BE A CONFLICT. EVENTUALLY WE WERE CLRED TO CLB AND CONTINUE TO OUR DEST. PRIMARY CONCERN WAS CTL OF THE ACFT WITH THE PITCH UP AND INCREASED STALL SPD WITH THE FLAPS RETRACTING. WHAT WE SHOULD HAVE DONE IS KEPT THE FLAPS WHERE THEY WERE AND LANDED WITH PARTIAL FLAPS.

Synopsis :
AN MD11 FREIGHTER BOUND FOR ZSSS STARTS A RETURN TO BEIJING WHEN THE FLAP DISAGREE CHKLIST HAS TO BE USED. ZBAA, FO.

ACN: 443923

Time
Date : 199907
Day : Fri
Local Time Of Day : 1201 To 1800

Place
Locale Reference.Airport : DFW.Airport
State Reference : TX
Altitude.MSL.Single Value : 2500

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.Tower : DFW.Tower
Make Model : Fokker 100

Component / 1
Aircraft Component : Stabilizer
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Flight Crew : First Officer
ASRS Report : 443923

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 3
Function.Controller : Local

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Declared Emergency
Resolutory Action.Flight Crew : Diverted To Alternate
Resolutory Action.Flight Crew : Landed In Emergency Condition

Supplementary
Problem Areas : Aircraft

Narrative :
LOCATION: TKOF 2500 FT S OF DFW RWY 18L. AFTER TKOF AT ABOUT 2500 FT WHILE HAND FLYING, THE STABILIZER TRIM UNCOMMANDED STARTED ROLLING BACK 'PITCHED UP,' THEN STARTED ROLLING FORWARD 'PITCHED DOWN.' THE STABILIZER TRIM WHEEL WAS MOVING FORWARD. WHEN I TRIED TO MOVE THE STABILIZER TRIM BACK WITH THE YOKE SWITCHES, THE TRIM WHEEL WOULD THEN START MOVING FORWARD AFTER I RELEASED THE TRIM SWITCHES. I TURNED OFF THE OVERHEAD STABILIZER TRIM SWITCHES. TRIMMED THE ACFT WITH THE TRIM WHEEL. DECLARED AN EMER AND RETURNED TO DFW. WE LANDED 700 LBS OVERWT.

Synopsis :
A FOKKER 100 FLC HAD UNCOMMANDED STABILIZER TRIM INPUTS ON TKOF FROM DFW.

ACN: 445001

Time
Date : 199908
Day : Tue
Local Time Of Day : 0601 To 1200

Place
Locale Reference.Airport : LGA.Airport
State Reference : NY
Altitude.MSL.Bound Lower : 400
Altitude.MSL.Bound Upper : 600

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.Tower : LGA.Tower
Make Model : B757 Undifferentiated or Other Model

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 20000
Experience.Flight Time.Last 90 Days : 180
Experience.Flight Time.Type : 2800
ASRS Report : 445001

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Local

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Other Anomaly : Smoke Or Fire
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Declared Emergency
Resolutory Action.Flight Crew : Diverted To Another Airport
Resolutory Action.Flight Crew : Landed As Precaution
Resolutory Action.Flight Crew : Landed In Emergency Condition
Consequence.Other : Company Review
Consequence.Other : Emotional Trauma
Consequence.Other : Flight Cancelled
Consequence.Other : Maintenance Action

Supplementary
Problem Areas : Aircraft
Problem Areas : Environmental Factor

Narrative :
DURING INITIAL CLB FROM RWY 4 AT LGA (RIGHT AFTER GEAR RETRACTION) EXPERIENCED LOUD BANG AND MOMENTARY YAW OF ACFT. INITIAL IMPRESSION OF BOTH CAPT AND FO WAS THAT SOMETHING HIT L SIDE OF ACFT. WITHIN SECONDS OF BANG, COCKPIT FILLED WITH SMOKE. DECLARED EMER, REQUESTED VECTORS TO JFK FOR IMMEDIATE LNDG. FLT ATTENDANTS CALLED AND RPTED CABIN FULL OF SMOKE. PRIMARY CONCERN WAS FLYING ACFT WITH POOR VISIBILITY BECAUSE OF SMOKE AND LNDG ASAP BECAUSE OF UNKNOWN SOURCE OF SMOKE AND CONCERN THAT FIRE MIGHT FOLLOW THE SMOKE PRETTY QUICKLY. LANDED ON RWY 13R JFK, STOPPED ON RWY AND INITIATED EVAC. EVAC PROCEEDED SMOOTHLY WITH NO INJURIES. A PRIMARY OBSERVATION AND LESSON FROM THIS EVENT IS THIS: SMOKE CAN OCCUR SO QUICKLY AND IN SUCH VOLUME THAT IT IS ALMOST IMPOSSIBLE TO GET BOTH OXYGEN MASK EYE GOGGLES ON PRIOR TO SMOKE SATURATION. THE SMOKE WE EXPERIENCED WAS NOT TOXIC. IF IT HAD BEEN, WE WOULD HAVE HAD TOXIC SMOKE INSIDE GOGGLES WITH NO WAY TO REMOVE IT PROPERLY OR QUICKLY ENOUGH. I HIGHLY RECOMMEND THAT ACRS SELECT A FULL FACE (QUICK DONNING) MASK THAT CAN BE WORN OVER GLASSES. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: ON CALLBACK, RPTR STATES THAT THE PROBABLE CAUSE OF THE LOUD BANG WAS IMPENDING DISINTEGRATION OF THE PORT ENG IN THE AREA OF THE 6TH STAGE HIGH PRESSURE COMPRESSOR. HE STATES THAT THE SMOKE WAS THE RESULT OF AN OIL SEAL FAILING IN THE L ENG AND REITERATES HOW INSTANTANEOUS WAS THE APPEARANCE OF THE SMOKE. THIS RPTR HAS SOME EXPERIENCE IN THE TRAINING DEPT OF THE COMPANY AND HAS KNOWLEDGE THAT FOR OVER 1 YR THE COMPANY HAS BEEN LOOKING INTO THE POSSIBILITY OF OBTAINING FULL FACE, QUICK DONNING SMOKE/OXYGEN MASKS. HE ALSO THINKS THAT ECONOMIC REASONS ARE RESPONSIBLE FOR THE NON ACQUISITION OF SAME. HE STATES THAT A MORE NEWS WORTHY EVENT MIGHT ACTUALLY PRECIPITATE SUCH A PURCHASE. THE RPTR WAS VERY PLEASED WITH THE PROFESSIONALISM OF THE FLC, CABIN CREW, AND THE ASSISTANCE PROVIDED BY ATC DURING THIS HAZARDOUS INCIDENT.

Synopsis :
A B757 EXPERIENCES LOUD BANG ON TKOF LGA. SMOKE FILLS COCKPIT. CREW DECLARES EMER AND RETURNS TO LAND. EVAC ON RWY AFTER ACFT STOPPED.

ACN: 445142

Time
Date : 199908
Day : Tue
Local Time Of Day : 0601 To 1200

Place
Locale Reference.Airport : LGA.Airport
State Reference : NY
Altitude.AGL.Single Value : 500

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.TRACON : N90.TRACON
Make Model : B757-200

Component / 1
Aircraft Component : Compressor
Aircraft Reference : X
Problem : Failed

Person / 1
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 5300
Experience.Flight Time.Last 90 Days : 175
Experience.Flight Time.Type : 720
ASRS Report : 445142

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain

Person / 3
Function.Controller : Departure

Person / 4
Function.Oversight : Flight Attendant In Charge

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Other Anomaly : Smoke Or Fire
Independent Detector.Other.Flight CrewA : 1
Resolutory Action.Flight Crew : Declared Emergency
Resolutory Action.Flight Crew : Diverted To Another Airport
Resolutory Action.Flight Crew : Landed In Emergency Condition
Resolutory Action.Controller : Issued New Clearance
Resolutory Action.Controller : Provided Flight Assist
Resolutory Action.Aircraft : Evacuated
Consequence.Other : Company Review
Consequence.Other : Flight Cancelled

Supplementary
Problem Areas : Aircraft
Problem Areas : Flight Crew Human Performance

Narrative :
DURING INITIAL CLBOUT FROM RWY 4 AT LGA (RIGHT AFTER GEAR RETRACTION) WE EXPERIENCED A LOUD BANG AND A MOMENTARY YAW. INITIAL IMPRESSION FOR BOTH PLTS WAS THAT SOMETHING HAD HIT THE L SIDE OF THE ACFT. WITHIN SECONDS OF THE BANG, THE COCKPIT FILLED WITH SMOKE. WE DECLARED AN EMER WITH NEW YORK DEP CTL AND REQUESTED VECTOR TO JFK FOR IMMEDIATE LNDG. FLT ATTENDANTS CALLED AND RPTED SMOKE IN THE CABIN ALSO. SOURCE OF SMOKE WAS NOT KNOWN AT THE TIME. LANDED ON RWY 13R AT JFK, STOPPED ON RWY AND INITIATED EVAC. EVAC PROCEEDED SMOOTHLY WITH NO INJURIES. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE FO STATED THAT THE COMPANY LATER SAID IT WAS THE 6TH STAGE OF THE COMPRESSOR THAT FAILED, BLOWING AN OIL SEAL THAT PRODUCED THE SMOKE IN THE ACFT.

Synopsis :
A B757-200 DIVERTS TO JFK AFTER LOSING AN ENG ON TKOF FROM LGA. SMOKE WAS IN THE COCKPIT AND CABIN. ACFT EVACED AT JFK.

ACN: 445543

Time
Date : 199908
Day : Wed
Local Time Of Day : 1801 To 2400

Place
Locale Reference.Airport : SFO.Airport
State Reference : CA
Altitude.MSL.Single Value : 1000

Environment
Flight Conditions : IMC

Aircraft / 1
Controlling Facilities.TRACON : O90.TRACON
Make Model : A320

Component / 1
Aircraft Component : ILS/VOR
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 18000
Experience.Flight Time.Last 90 Days : 150
Experience.Flight Time.Type : 800
ASRS Report : 445543

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Approach

Person / 4
Function.Oversight : Supervisor
Function.Controller : Supervisor

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Other Spatial Deviation : Track Or Heading Deviation
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.None Taken : Detected After The Fact
Consequence.FAA : Reviewed Incident With Flight Crew

Supplementary
Problem Areas : Aircraft
Problem Areas : Airport
Problem Areas : Flight Crew Human Performance

Narrative :
ON ILS APCH TO RWY 28R AT SFO AT 1000 FT MSL (IMC), GOT FULL LOC DEFLECTION TO BOTH SIDES SEVERAL TIMES. DISCONNECTED AUTOPLT AFTER 30 DEG ANGLE OF BANK TURNS FROM FLT DIRECTOR FOLLOWING LOC. HAND-FLEW APCH AND BROKE OUT VMC SHORTLY THEREAFTER. VMC AT APPROX 700-800 FT. LANDED NORMALLY. LCL SUPVR (ATC) SAID HE THOUGHT IT WAS DUE TO TAXIING ACFT IN ILS CRITICAL AREA, HOWEVER I'VE NEVER SEEN THIS MUCH DEFLECTION. AS A RESULT OF THIS DISTR, WE LANDED WITHOUT A CLRNC, OR SO WE THOUGHT. THE SUPVR SAID THAT ONE WAS ISSUED, SO THEY WERE OK WITH IT, BUT THEY FAILED TO SWITCH US TO TWR, AND WE MISSED IT. THIS MUCH DEFLECTION OF THE LOC IS CLRLY UNSAFE.

Synopsis :
A320 FLC EXPERIENCES LOC DEFLECTION ON APCH TO RWY 28R AT SFO.

ACN: 457415

Time
Date : 199912
Day : Thu
Local Time Of Day : 1201 To 1800

Place
Locale Reference.Airport : MCO.Airport
State Reference : FL
Altitude.MSL.Single Value : 12000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.ARTCC : ZJX.ARTCC
Make Model : B737-200

Component / 1
Aircraft Component : Rudder Control System
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 15590
Experience.Flight Time.Last 90 Days : 255
Experience.Flight Time.Type : 8090
ASRS Report : 457415

Person / 2
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 7500
Experience.Flight Time.Last 90 Days : 250
Experience.Flight Time.Type : 700
ASRS Report : 457611

Person / 3
Function.Controller : Radar

Events
Anomaly.Aircraft Equipment Problem : Critical
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Overcame Equipment Problem
Consequence.Other : Maintenance Action

Situations
Aircraft.Make Model.Value : 148.32
Aircraft.Aircraft Component.Value : 27.21

Supplementary
Problem Areas : Aircraft

Narrative :
ON DESCENT INTO ORL WE EXPERIENCED A POSSIBLE UNCOMMANDED L RUDDER MOVEMENT. CALLBACK CONVERSATION WITH REPORTER REVEALED THE FOLLOWING INFO: CREW WAS FLYING A B-737-200 ACFT. AT 12000 FT AND 250 KTS, WITH THE AUTOPILOT ENGAGED IN HDG SELECT, THE CAPT NOTICED THE AUTOPILOT HOLDING A SUBSTANTIAL R WING DOWN AILERON INPUT. THE ACFT WAS CROSS CONTROLLED WITH NOTICEABLE L RUDDER. THE CAPT DISCONNECTED THE AUTOPILOT AND GOT A LARGE ACFT KICK AS THE AUTOPILOT WAS NO LONGER HOLDING R AILERON. THE KICK WAS LARGE ENOUGH TO DISLODGE MOST ITEMS IN THE AFT GALLEY. THERE WERE NO INJURIES TO THE FA OR PAX AS EVERYONE WAS SEATED. THE CAPT DID NOT HAVE TIME TO NOTICE THE RUDDER INDICE OR PERFORM ANY EMERGENCY QRH CHECKLISTS. AS SOON AS THE ACFT KICK OCCURRED EVERYTHING RETURNED TO NORMAL, AND NO FURTHER PROBLEMS WERE NOTED. THE CAPT DID NOT KNOW THE STATUS OF THE DIGITAL YAW DAMPER AD, OR WHAT MAINT FOUND. ALL APPROPRIATE PARTIES WERE NOTIFIED AND THE INVESTIGATION IS ONGOING. CALLBACK CONVERSATION WITH REPORTER ACN 457611 REVEALED THE FOLLOWING INFO: RPTR STATED THAT FUEL BALANCE BEFORE, DURING AND AFTER THE AUTOPILOT WAS ENGAGED APPEARED TO BE MATCHED, INDICATING THERE WAS NO NEED FOR A HEAVY WING TRIM. HE FURTHER STATED THAT BASED ON HIS BELIEF AND THE FLYING CAPTAIN'S COMMENTS, THE SUDDEN YAW ACTION COULD HAVE BEEN CAUSED BY A FAULTY YAW DAMPER. HE ALSO STATED THAT THE CLOSEST AIRCRAFT TO THEM AT THE TIME WAS A B737-200, 8.3 MILES AHEAD AND 2600 FT BELOW. THIS INDICATED THE SUDDEN YAW WAS PROBABLY NOT CAUSED BY WAKE TURBULENCE.

Synopsis :
B-737 CREW HAD UNCOMMANDED L RUDDER INPUT.

ACN: 462939

Time
Date : 200002
Day : Sat
Local Time Of Day : 1801 To 2400

Place
Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 7500

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.TRACON : ZZZ.TRACON
Make Model : MD-83

Component / 1
Aircraft Component : Horizontal Stabilizer Trim
Aircraft Reference : X
Problem : Failed

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 19000
Experience.Flight Time.Last 90 Days : 180
Experience.Flight Time.Type : 4500
ASRS Report : 462939

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Departure

Events
Anomaly.Aircraft Equipment Problem : Critical
Independent Detector.Other.Flight CrewA : 2
Independent Detector.Other.Flight CrewB : 1
Resolutory Action.Flight Crew : Landed As Precaution
Consequence.Other : Maintenance Action

Situations
Aircraft.Make Model.Value : 583.44
Aircraft.Aircraft Component.Value : 27.41

Supplementary
Problem Areas : Aircraft

Narrative :
WHILE DEPARTING ZZZ ON THE ABC 3 DEP, WE WERE IN A L TURN DIRECT ABC VOR. CLBING THROUGH 7500 FT AT 210 KTS WITH SLATS EXTENDED AT 30 DEG BANK, FO CALLED FOR IAS 250 KTS, SET SPD 250 KTS, BANK ANGLE 15 DEG, SLATS RETRACT, AFTER TKOF CHECK. AS HE WAS ACCELERATING AND USING THE PRIMARY TRIM, THE TRIM MOTOR WOULD NOT RESPOND. WE CHECKED THE TRIM SWITCH ON MY SIDE, THE SUITCASE HANDLE SWITCH AND THE ALTERNATE TRIM SWITCH ON CTR PEDESTAL, WITH NO RESPONSE. I ASKED HIM TO SLOW TO 200 KTS AND EXTEND SLATS. WE ASKED FOR EXTENDED DOWNWIND AND THAT WE WERE RETURNING TO ZZZ. WE RECEIVED APCH CLRNC AND LANDED USING FLAPS 40 DEG AND A BUG SPD OF 140 KTS. THE ACFT FLEW FINE AT THAT SPD ABOUT 15 LBS OF PRESSURE.

Synopsis :
FLC OF AN MD83 RETURNED TO LAND AFTER THE PITCH TRIM FAILED TO RESPOND TO ALL ATTEMPTS TO RETRIM THE PITCH AFTER WING SLAT RETRACTION DURING INITIAL ZZZ SID DEP CLB.

ACN: 464170

Time
Date : 200002
Day : Mon
Local Time Of Day : 1201 To 1800

Place
State Reference : IN
Altitude.MSL.Bound Lower : 32500
Altitude.MSL.Bound Upper : 33500

Environment
Flight Conditions : IMC

Aircraft / 1
Controlling Facilities.ARTCC : ZAU.ARTCC
Make Model : MD-80 Super 80

Component / 1
Aircraft Component : Autopilot
Aircraft Reference : X
Problem : Malfunctioning

Component / 2
Aircraft Component : Aileron Trim System
Aircraft Reference : X
Problem : Malfunctioning

Component / 3
Aircraft Component : Elevator ControlSystem
Aircraft Reference : X
Problem : Malfunctioning

Person / 1
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 25000
Experience.Flight Time.Last 90 Days : 240
Experience.Flight Time.Type : 1100
ASRS Report : 464170

Person / 2
Function.Flight Crew : First Officer

Person / 3
Function.Controller : Radar

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Altitude Deviation : Excursion From Assigned Altitude
Anomaly.Non Adherence : Clearance
Anomaly.Other Anomaly : Loss Of Aircraft Control
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Declared Emergency
Resolutory Action.Flight Crew : Diverted To Another Airport
Resolutory Action.Flight Crew : Landed In Emergency Condition
Resolutory Action.Flight Crew : Regained Aircraft Control
Resolutory Action.Controller : Issued New Clearance
Resolutory Action.Controller : Provided Flight Assist
Consequence.Other : Company Review
Consequence.Other : Maintenance Action

Supplementary

Problem Areas : Aircraft

Problem Areas : Weather

Narrative :
IN CRUISE, AUTOPLT ON, THE ACFT NOSED OVER. THE FO AND I BOTH GRABBED THE YOKE. THE TRIM WAS INOP AND WE HAD TROUBLE GETTING AUTOPLT TO DISENGAGE. WHEN IT DID THE ACFT WENT NOSE UP AND THROUGH FL330 TO FL335. WE HAD NO TRIM AND ADVISED ATC WE NEEDED TO LAND AND WE MADE AN UNSCHEDULED STOP IN SOUTH BEND, IN. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: ACFT INVOLVED WAS AN MD80 OR AN MD82. CREW HAD BEGUN THE FLT SEQUENCE AFTER MAJOR ACFT MAINT. THE ACFT JACK SCREW AND ALL TRIM MECHANISMS HAD BEEN REPLACED. THE SECOND LEG FLOWN WAS A LAS TO CLE FLT. ON DEP, THE ACFT ENCOUNTERED MODERATE TO SEVERE ICING ON CLIMB OUT. ALL ACFT THERMAL ANTI-ICE WAS USED, WHICH SUCCESSFULLY HANDLED THE ICING. AFTER APPROX 2 1/2 HOURS IN CRUISE, THE ACFT PITCHED NOSE DOWN. THE CREW BOTH GRABBED THE WHEEL TO PULL BACK. THE CAPT ALSO TRIMMED THE ACFT NOSE UP. THIS SHOULD HAVE DISCONNECTED THE AUTOPLT. IT DID NOT. AFTER THE AUTOPLT WAS OVERPOWERED, THE RESULTING CLB WAS STOPPED AT ABOUT FL335. AT THIS POINT THE ACFT BEGAN AN UNCTLED 30 DEG BANK R TURN. THE CREW WAS UNABLE TO MOVE THE LATERAL TRIM. AN EMER WAS DECLARED AND ATC WAS REQUESTED FOR VECTORS TO THE NEAREST SUITABLE ARPT. AFTER DESCENDING BELOW THE FREEZING LEVEL, ALL FLT CTLS BECAME NORMAL. THE CREW WAS EXTENSIVELY DEBRIEFED BY ACR MAINT AND ENGINEERING. ALL COMPONENT ITEMS WERE REPLACED AND THE ACFT WAS GIVEN A FLT TEST. ALL WAS FOUND OK. ON THE NEXT REVENUE FLT, THE ACFT HAD UNCTLED ROLL PROBS EXACTLY AS DESCRIBED PREVIOUSLY. THIS ACFT REMAINS GROUNDED. SECOND CONVERSATON WITH RPTR REVEALED THE FOLLOWING INFO: RPTR STATED IN THIS SUBSEQUENT CALLBACK THAT HE WAS ADVISED THAT THIS ACFT WAS GIVEN AN EXAMINATION BY THE MANUFATURE'S ENGINEERING DEPARTMENT. INCLUDING THE FAA ENGINEERING AND NTSB, TO DETERMINE ACTUAL CAUSAL FACTORS. THE TAIL PARTS WERE ALL REPLACED AGAIN. EXAMINATION FOUND THAT THE MOISTURE DRAIN HOLES WERE ALL OPEN, BUT THAT THE AILERON SYSTEM HAD 2 DISCREPANCIES. THE AILERON TRIM CONTROL SWITCH HAD A DEAD SPOT AND THE THERE WAS A NOTCH IN AN AILERON CONTROL GEAR WHICH CAUSED THE AILERON MOVEMENT TO LOCK UP TEMPORARILY UNTIL MANUALLY OVERRIDDEN. THE ACFT HAS NOW BEEN BACK IN SERVICE FOR TWO WEEKS WITH NO REPORTED PROBLEMS. THE INVESTIGATORS COMMENTED THAT IT IS DIFFICULT TO POSITIVELY DETERMINE THE ORIGINAL CAUSE OF THE PROBLEM AFTER REPLACING ALL PARTS SINCE EACH ONE INDIVIDUALLY CHECKED OK, AND THEREFORE ARE NOT WORKING TOGETHER TO FIND, WITH THE EXCEPTION OF THE PARTS OF THE AILERON CONTROL SYSTEM. THE NTSB/FAA DID REVIEW THE FLT RECORDER IN THEIR INVESTIGATION.

Synopsis :
MD80 HAD PITCH AND ROLL PROBS AT CRUISE, FL330.

ACN: 464451

Time
Date : 200002
Day : Tue
Local Time Of Day : 1801 To 2400

Place
Locale Reference.Airport : ORD.Airport
State Reference : IL
Altitude.MSL.Single Value : 5000

Environment
Flight Conditions : VMC

Aircraft / 1
Controlling Facilities.TRACON : C90.TRACON
Make Model : EMB ERA 145 ER&LR

Component / 1
Aircraft Component : Horizontal Stabilizer Trim
Aircraft Reference : X
Problem : Failed

Person / 1
Function.Flight Crew : First Officer
Experience.Flight Time.Total : 2700
Experience.Flight Time.Last 90 Days : 160
Experience.Flight Time.Type : 350
ASRS Report : 464451

Person / 2
Function.Oversight : PIC
Function.Flight Crew : Captain
Experience.Flight Time.Total : 13000
Experience.Flight Time.Last 90 Days : 120
Experience.Flight Time.Type : 120
ASRS Report : 464061

Person / 3
Function.Controller : Departure

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Other Anomaly : Loss Of Aircraft Control
Independent Detector.Other.Flight CrewA : 1
Independent Detector.Other.Flight CrewB : 2
Resolutory Action.Flight Crew : Declared Emergency
Consequence.FAA : Investigated
Consequence.Other : Company Review
Consequence.Other : Maintenance Action

Situations
Aircraft.Make Model.Value : 332.90
Aircraft.Aircraft Component.Value : 27.41

Supplementary
Problem Areas : Aircraft
Problem Areas : Flight Crew Human Performance

Narrative :
UPON TRYING TO LEVEL OFF AT 5000 FT MSL, I TOLD THE CAPT THAT WAS I UNABLE TO HOLD THE NOSE OF THE ACFT DOWN. EXERTING FULL FORWARD PRESSURE ON CTL YOKE, THE CAPT TRIED HIS PRIMARY PITCH CTL TO NO AVAIL AND THEN THE SECONDARY. NEITHER HAD AN EFFECT ON THE CTLS. AFTER ANOTHER ATTEMPT ON THE SECONDARY TRIM THE CAPT WAS ABLE TO REDUCE THE NOSE TRIM FROM 8 UNITS UP TO 6 UNITS UP. STILL FULL FORCE WAS NEEDED TO KEEP THE NOSE DOWN. CAPT THEN TOOK CTL OF THE ACFT, I DECLARED AN EMER AND REQUESTED AN IMMEDIATE RETURN TO THE ARPT. AFTER RECEIVING VECTORS FOR RWY 22L AT ORD, CAPT CALLED FOR FLAPS 9 DEGS THEN GEAR, FLAPS 22 DEGS, THEN FLAPS 95 DEGS ON SCHEDULE. AS THE AIRLOAD ON THE ACFT WAS REDUCED MORE CTL WAS GAINED. AT APPROX XA:30 WE LANDED WITHOUT INCIDENT ON RWY 22L. AS FAR AS I KNOW, BOTH PRIMARY PITCH CTL SWITCHES, THE SECONDARY PITCH CTL SYS AND THE HORIZONTAL STABILIZER CTL UNIT (HSCU) ARE BEING REPLACED. I BELIEVE AT TOUCHDOWN, WE HAD SOMEWHERE AROUND 5 UNITS OF NOSE UP TRIM. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR STATED NEITHER PRIMARY NOR SECONDARY STABILIZER TRIM OPERATED TO CORRECT NOSE UP CONDITION. THE RPTR SAID THIS AIRPLANE IS NEW AND WAS RPTED HAVING STABILIZER TRIM PROBS IN THE NOSE DOWN DIRECTION TWO DAYS PRIOR TO THIS EVENT. THE RPTR SAID THE CORRECTIVE ACTION TAKEN IN THAT EVENT IS UNKNOWN. THE RPTR STATED ON THE GND MAINT COULD DUPLICATE THE RPT AND REPLACED THE PRIMARY AND SECONDARY ACTUATORS AND A HORIZONTAL STABILIZER CTL UNIT WITH NO SUCCESS. THE RPTR SAID THE JACK SCREW ASSEMBLY WITH GEARBOX WAS REPLACED WITH TWO MORE ACTUATORS AND THE ACTUATORS WERE FOUND BURNED OUT. THE RPTR STATED A THIRD SET OF ACTUATORS WAS REPLACED WITH THE SAME RESULT AND ONLY A FOURTH SET OF PRIMARY AND SECONDARY ACTUATORS CORRECTED THE PROB. THE RPTR SAID TO HIS KNOWLEDGE THERE HAVE BEEN NO OTHER STABILIZER PROBS ON THE FLEET OTHER THAN THIS AIRPLANE. THE RPTR SAID THE CIRCUIT BREAKERS WERE CHECKED AND FOUND NOT TRIPPED. SUPPLEMENTAL INFO FROM ACN 464061: DEPARTED ORD RWY 22L, FO WAS FLYING. AS WE APCHED 5000 FT HE STATED THAT HE WAS HAVING TROUBLE GETTING THE NOSE DOWN. I TRIED TO TRIM IT FROM 8 DEGS NOSE UP WITH MY PRIMARY PITCH TRIM AND WAS UNSUCCESSFUL. I THEN TRIED THE SECONDARY PITCH TRIM AND WAS ALSO UNSUCCESSFUL ON THE FIRST FEW ATTEMPTS. AFTER SOME TRYING I WAS ABLE TO GET IT DOWN TO 6 DEGS NOSE UP WITH THE SECONDARY PITCH TRIM. AT THAT TIME I TOOK CTL OF THE ACFT AND WE DECLARED AN EMER. I REDUCED THRUST AND AS WE APCHED 200 KTS I ASKED FOR FLAPS 9 DEGS. THEN GEAR AND FLAPS 22 DEGS, AS WE SLOWED AND THE AERODYNAMIC LOAD DECREASED, THE ACFT BECAME MORE CONTROLLABLE. ON APCH I WAS ABLE TO GET THE TRIM TO AROUND 4 DEGS OR SO. THE DATA RECORDER WILL PROBABLY GIVE MORE INFO ON THAT. WE LANDED FLAPS 45 DEGS WITH NO PROB AND TAXIED IN. TKOF WEIGHT WAS 39471 POUNDS SO WE DID NOT MAKE AN OVERWEIGHT LNDG. PULLED CVR CIRCUIT BREAKER PRIOR TO LEAVING ACFT. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: AFTER LNDG THE CREW RPTED THAT ALL TRIM FUNCTIONS RETURNED TO NORMAL. THE ACFT WAS REMOVED FROM SVC BY THE ACR AND REMAINED GROUNDED FOR OVER THREE DAYS. DURING TROUBLESHOOTING, THREE SEPARATE PRIMARY HORIZONTAL STAB CTL UNITS AND THREE SEPARATE SECONDARY HORIZONTAL STAB CTL UNITS WERE USED IN ORDER TO FIND UNITS WHICH WOULD OPERATE SUCCESSFULLY WITH EACH OTHER. THE RPTR QUESTIONS THE ACFT DESIGN WHICH ALLOWS NO DIRECT CTL OF SOMETHING AS CRITICAL AS ACFT PITCH TRIM. THE CAPT HAS HEARD OF OTHER SIMILAR PROBS WITH THE ACFT. THE CREWS PULLED AND RESET VARIOUS ACFT CIRCUIT BREAKERS TO RESTORE THE TRIM SYS. THIS PROC IS NOT AUTHORIZED.

Synopsis :
AN EMBRAER 145 AT LEVELOFF AT 5000 FT DECLARED AN EMER AND DIVERTED DUE TO UNABLE TO TRIM THE ACFT NOSE DOWN CAUSED BY STABILIZER TRIM ACTUATORS' FAILURE.